

Access DB# 107347

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: HOA VAN LE Examiner #: 60626 Date: 02 Dec. 2003  
Art Unit: 1752 Phone Number 30 8-2295 Serial Number: 10/617,647  
Mail Box and Bldg/Room Location: \_\_\_\_\_ Results Format Preferred (circle): PAPER DISK E-MAIL

**If more than one search is submitted, please prioritize searches in order of need.**

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Please see the attachment

Earliest Priority Filing Date: \_\_\_\_\_

*\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for polymer as disclosed  
in claim 1 for use in a photographic art.

Thank you

**WEST**

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Search Form

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Cases

**Search Results -**

Terms	Documents
(develop? or bleach? or fix?) same (poly? adj5 (?thiol or ?disulfide or ?mercato or ?sulfate or ?sulfone or ?sulfonic or sulfonate))	0

Database:

US Patents Full-Text Database  
 US Pre-Grant Publication Full-Text Database  
 JPO Abstracts Database  
 EPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L2

Refine Search

Recall Text

Clear

**Search History**DATE: Tuesday, December 02, 2003   [Printable Copy](#)   [Create Case](#)**Set Name   Query**

side by side

**Hit Count   Set Name**

result set

*DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR*

<u>L2</u>	(develop? or bleach? or fix?) same (poly? adj5 (?thiol or ?disulfide or ?mercato or ?sulfate or ?sulfone or ?sulfonic or sulfonate))	0	<u>L2</u>
<u>L1</u>	((develop? or bleach? or fix?) adj solution) same (poly? adj5 (?thiol or ?disulfide or ?mercato or ?sulfate or ?sulfone or ?sulfonic or sulfonate))	0	<u>L1</u>

END OF SEARCH HISTORY



# STIC Search Report

## EIC 1700

STIC Database Tracking Number: 107347

TO: Hoa V Le  
Location:  
Art Unit : 1752  
November 4, 2003

From: Barba Koroma  
Location: EIC 1700  
CP3/4-3D62  
Phone: 305-3542

Case Serial Number: 10/617647

barba.koroma@uspto.gov

### Search Notes

Examiner V Le,

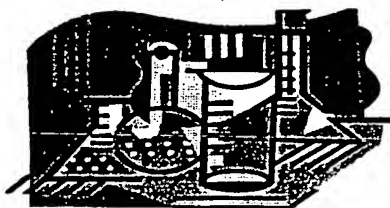
Please find attached results of the search you requested. Note that the title of hits have been listed to help you go through the results set quickly. This is followed by a detailed printout of records.

Various components of the claimed invention as spelt out in the search request and in the claims were searched in REGISTRY and CAPLUS databases.

Please let me know if you have any questions.  
Thanks.

*Please do not copy*

*Hoa V Le*



EIC 1700 / LUTRELLE F. PARKER LAW LIBRARY

*Scientific and Technical Information Center*



## Search Results Feedback Form

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact the searcher whose name is circled below.

Kathleen Fuller 308-4290

John Calve 308-4139

Barba Koroma 305-3542

Eric Linnell 308-4143

All searchers are located in the library in CP3/4 3D62





# STIC Search Results Feedback Form

**EIC17000**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader  
308-4290, CP3/4-3D62

## Voluntary Results Feedback Form

- I am an examiner in Workgroup:  Example: 1713
- Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC1700 CP3/4 3D62



=> file reg

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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 3 NOV 2003 HIGHEST RN 612478-18-9  
DICTIONARY FILE UPDATES: 3 NOV 2003 HIGHEST RN 612478-18-9

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STN Note 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> file capls

'CAPLS' IS NOT A VALID FILE NAME  
SESSION CONTINUES IN FILE 'REGISTRY'

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that are available. If you have requested multiple files, you can  
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FILE COVERS 1907 - 4 Nov 2003 VOL 139 ISS 19  
FILE LAST UPDATED: 3 Nov 2003 (20031103/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que

L1 STR

CH2:C

1 2

NODE ATTRIBUTES:

CONNECT IS M2 RC AT 2

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 2

STEREO ATTRIBUTES: NONE

L2 STR

S 1

NODE ATTRIBUTES:

CONNECT IS M1 RC AT 1

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 1

STEREO ATTRIBUTES: NONE

L3 SCR 2043

L4 ( 45701)SEA FILE=REGISTRY SSS FUL L3 AND L1 AND L2

L5 ( 31448)SEA FILE=CAPLUS ABB=ON PLU=ON L4

L6 ( 208531)SEA FILE=CAPLUS ABB=ON PLU=ON ?PHOTOGRAPH?

L7 ( 27353)SEA FILE=CAPLUS ABB=ON PLU=ON SILVER HALIDE AND L6

L8 ( 326404)SEA FILE=CAPLUS ABB=ON PLU=ON 74?/CC

L9 ( 328201)SEA FILE=CAPLUS ABB=ON PLU=ON L7 OR L8

L10 ( 5274)SEA FILE=CAPLUS ABB=ON PLU=ON L5 AND L9

L11 ( 355)SEA FILE=CAPLUS ABB=ON PLU=ON L10 AND (PROCESS? OR DEVELOP?) (4A) SOLU?

L12 ( 246)SEA FILE=CAPLUS ABB=ON PLU=ON L11 AND (?ACID? OR ?SULFATE? OR ?SULPHATE? OR ?PHOSPHATE?)

L13 ( 66)SEA FILE=CAPLUS ABB=ON PLU=ON L12 AND (SILVER OR AG)

L14 ( 64)SEA FILE=CAPLUS ABB=ON PLU=ON L13 AND ?PHOTO?

L15 61 SEA FILE=CAPLUS ABB=ON PLU=ON L14 AND (SOLUTION OR AQ OR AQUEOUS OR LIQUID)

=> d ti 1-61

L15 ANSWER 1 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Protective overcoat for **photographic** elements

L15 ANSWER 2 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Protective overcoat for **photographic** elements

L15 ANSWER 3 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Photographic** elements coated on transparent support with  
reflective protective overcoat

L15 ANSWER 4 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for processing **silver halide**  
**photographic** films using developer containing ascorbic  
acid derivative and **photographic** film containing fluoro  
surfactant

L15 ANSWER 5 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Laser-sensitive **silver halide photographic**  
material and its processing

L15 ANSWER 6 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Heat-developable **photographic** material containing  
water-soluble polymer-based thickener for improved joint seam

L15 ANSWER 7 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Protective epoxy overcoat that resists fingerprints, stains and spills for  
**photographic** elements

L15 ANSWER 8 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Black-and-white **silver halide photographic**  
material containing polymer latex and hydrazine and its processing

L15 ANSWER 9 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Protective overcoat comprising interpenetrating network for  
**photographic** elements

L15 ANSWER 10 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Overcoat for reticulation control in **photographic** elements

L15 ANSWER 11 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Protective overcoat for **photographic** elements

L15 ANSWER 12 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic**  
**photosensitive** material and processing thereof

L15 ANSWER 13 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI A correcting agent for a **silver** imaged lithographic printing  
plates

- L15 ANSWER 14 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide** material for optical memory device with luminescent reading and method for treatment thereof
- L15 ANSWER 15 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Processing of tetrazolium-containing **silver halide photographic** material with mercapto compound-containing developer to improve characteristic and dot quality
- L15 ANSWER 16 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic** material containing hydrazine and gelatin-interacting compound, its process and the image-forming method
- L15 ANSWER 17 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic** material and image formation using it
- L15 ANSWER 18 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic** material containing a hydrazine and a development inhibitor releaser and its processing
- L15 ANSWER 19 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Imaging element capable of providing in single layer image and independent magnetic record
- L15 ANSWER 20 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for processing **silver halide photographic** material containing a polyamide with a reductone-containing developer to improve neutral black tone
- L15 ANSWER 21 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Processing solution** for **silver salt** diffusion transfer lithographic plate
- L15 ANSWER 22 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Photopolymerizable** compositions and their cured products
- L15 ANSWER 23 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic** materials and processing thereof
- L15 ANSWER 24 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic** materials with high sensitivity in IR region
- L15 ANSWER 25 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic** materials with high sensitivity in red light regions
- L15 ANSWER 26 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

- TI Rapid processing of **silver halide** black-and-white **photographic** material using fixer containing nonionic surfactant to prevent **silver** stain
- L15 ANSWER 27 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for processing **silver halide** **photographic** material
- L15 ANSWER 28 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for processing **silver halide** color **photographic** material
- L15 ANSWER 29 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for processing of **silver halide** color **photographic** material
- L15 ANSWER 30 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for continuous processing **silver halide** color **photographic** material by color developer containing hydroxylamine derivative
- L15 ANSWER 31 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Rapid development - processing of **silver halide** **photographic** materials
- L15 ANSWER 32 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Rapid color **photographic** development using developer containing poly(styrenesulfonic acid) derivative
- L15 ANSWER 33 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Processing of **silver halide** color **photographic** material
- L15 ANSWER 34 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Processing of **silver halide** color **photographic** material
- L15 ANSWER 35 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide** color **photographic** material with stable color rendition and color images
- L15 ANSWER 36 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for processing **silver halide** color **photographic** material
- L15 ANSWER 37 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Processing of **silver halide** color **photographic** material with improved decoloring and cyan stain
- L15 ANSWER 38 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Processing of **silver halide** color **photographic** materials

- L15 ANSWER 39 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for processing **silver halide** color **photographic** light-sensitive materials with **sulfinic acid** -containing **solution** for stain-free images
- L15 ANSWER 40 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Color **photographic** image formation by rapid processing
- L15 ANSWER 41 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Color **photographic** processing method
- L15 ANSWER 42 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photosensitive** materials and their reducing treatment
- L15 ANSWER 43 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide** color **photographic** materials for processing without water washing
- L15 ANSWER 44 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Photographic silver halide** recording material
- L15 ANSWER 45 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver halide photographic** material for **photomechanical** process and method for its reduction processing
- L15 ANSWER 46 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Radiographic image forming
- L15 ANSWER 47 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Photosensitive silver halide** **photographic** material
- L15 ANSWER 48 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Hydrazide compositions and **photographic** materials containing them
- L15 ANSWER 49 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Silver** complex diffusion-transfer **photographic** **photosensitive** material
- L15 ANSWER 50 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Graft polymers as layers for controlling diffusion in **photographic** products
- L15 ANSWER 51 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Graft polymer as a layer for controlling diffusion in **photographic** products
- L15 ANSWER 52 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Amide compounds and polymers thereof useful in **photographic** materials

L15 ANSWER 53 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Photographic** elements having hydrophilic colloid layers containing compounds having activator precursors and hydrophobic developing agents uniformly loaded in latex polymer particles

L15 ANSWER 54 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Pyrazoloneazo dye-releasing coupler for diffusion-transfer **photographic** materials

L15 ANSWER 55 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Synthetic **silver halide** emulsion binder

L15 ANSWER 56 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Polymers containing resorcinol groups for use in **photographic** elements

L15 ANSWER 57 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Imaging systems containing optically active polysulfoxide groups

L15 ANSWER 58 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Photographic** materials containing mordants

L15 ANSWER 59 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Photographic** film unit for color **photographs**

L15 ANSWER 60 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI Mordant compositions for use in **photographic** elements

L15 ANSWER 61 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

TI **Photographic** emulsions for rapid processing

=> d ibib abs hitstr ind total l61

L61 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d ibib abs hitstr ind total l15

L15 ANSWER 1 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:356069 CAPLUS

DOCUMENT NUMBER: 138:360358

TITLE: Protective overcoat for **photographic** elements

INVENTOR(S): Yau, Hwei-ling; O'Connor, Kevin Michael; Flood, Elmer Charles; Decker, David E.

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

SOURCE: Eur. Pat. Appl., 29 pp.



CODEN: EPXXDW

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1308777	A1	20030507	EP 2002-79441	20021024
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2003162138	A1	20030828	US 2001-7359	20011105
JP 2003149768	A2	20030521	JP 2002-321120	20021105

PRIORITY APPLN. INFO.: US 2001-7359 A 20011105

AB The present invention is a **photog.** element which includes a support, at least one **silver-halide** emulsion layer superposed on the support and a **processing-soln** .-permeable overcoat overlying the **silver-halide** emulsion layer that becomes water-resistant in the final product, without requiring lamination or fusing. The coating composition comprises a blocked copolymer of ethylene oxide and propylene oxide which has been found to improve wet durability, prevent the retention of iron, and improve the conversion of the overcoat to a water-resistant layer during processing. The present invention is also directed to a method of making a **photog.** print involving developing the **photog.** element.

IT 519175-94-1P, Butyl methacrylate-ethyl acrylate-sodium 2-sulfo-1,1-dimethylethyl acrylamide-vinylidene graft copolymer  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (core-shell; protective overcoat for **photog.** elements containing)

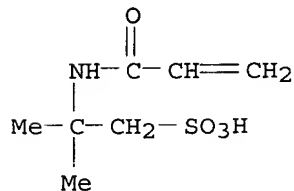
RN 519175-94-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 1,1-dichloroethene, ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt, graft (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

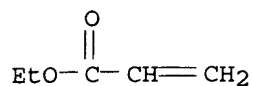


⊖ Na

CM 2

CRN 140-88-5

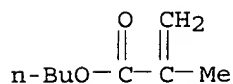
CMF C5 H8 O2



CM 3

CRN 97-88-1

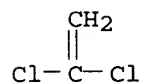
CMF C8 H14 O2



CM 4

CRN 75-35-4

CMF C2 H2 Cl2



IC ICM G03C001-76

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

ST protective overcoat **photog** emulsion

IT Coating materials

**Photographic** emulsions

(protective overcoat for **photog.** elements)

IT Polyurethanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(protective overcoat for **photog.** elements containing)

IT 519175-94-1P, Butyl methacrylate-ethyl acrylate-sodium

2-sulfo-1,1-dimethylethyl acrylamide-vinylidene graft copolymer

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

KOROMA EIC1700

(core-shell; protective overcoat for **photog.** elements containing)  
 IT 30394-85-5P, Ethyl acrylate-methacrylic **acid**-vinylidene chloride copolymer 479201-21-3P, Bisphenol A-1,4-butanediol-dimethylolpropionic **acid**-isophorone diisocyanate-Tone0260 copolymer 519175-93-0P, Bisphenol A-1,4-butanediol-dimethylolpropionic **acid**-isophorone diisocyanate-PC1733 copolymer 519175-95-2P, Ethyl acrylate-2-hydroxyethyl methacrylate-vinylidene chloride copolymer  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (protective overcoat for **photog.** elements containing)  
 IT 25248-42-4DP, Polycaprolactone, SRU, polyol derivs.; MW=3000  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (protective overcoat for **photog.** elements containing)  
 IT 106392-12-5, Pluronic F-127 110617-70-4, Tetronic 1307 115965-96-3, Airvol 203  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (protective overcoat for **photog.** elements containing)  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:864340 CAPLUS  
 DOCUMENT NUMBER: 137:360264  
 TITLE: Protective overcoat for **photographic** elements  
 INVENTOR(S): Jones, Tamara K.; Lobo, Lloyd A.; Nair, Mridula; O'Connor, Kevin M.; Qiao, Tiecheng A.; Wang, Yongcai; Whitesides, Thomas H.; Yau, Hwei-ling  
 PATENT ASSIGNEE(S): Eastman Kodak Company, USA  
 SOURCE: U.S., 20 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6479222	B1	20021112	US 2000-621267	20000721
PRIORITY APPLN. INFO.:			US 2000-621267	20000721

AB The present invention relates to a **photog.** element which includes a support, at least one **silver halide** emulsion layer superposed on the support and a **processing-solution**-permeable protective overcoat overlying the **silver halide** emulsion layer that becomes water-resistant in the final product without lamination or fusing. The present invention is also directed to a method of making a **photog.** print involving developing the **photog.** element.

IT 474901-65-0P  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(protective overcoat for **photog.** elements containing)

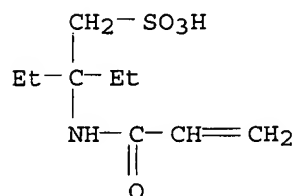
RN 474901-65-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with  
2-ethyl-2-[(1-oxo-2-propenyl)amino]-1-butanefulfonic acid monosodium salt  
(9CI) (CA INDEX NAME)

CM 1

CRN 143453-01-4

CMF C9 H17 N O4 S . Na

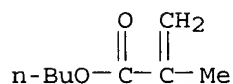


● Na

CM 2

CRN 97-88-1

CMF C8 H14 O2



IC ICM G03C001-76

ICS G03C011-06; G03C011-08

NCL 430350000

CC **74-2** (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

Section cross-reference(s): 35, 38

ST **photog** emulsion protective overcoat

IT Coating materials

**Photographic emulsions**

(protective overcoat for **photog.** elements)

IT 25068-38-6, Epon 1001F 25135-39-1, Carboset 525 54590-72-6, **AQ**  
-55

RL: POF (Polymer in formulation); TEM (Technical or engineered material  
use); USES (Uses)

(protective overcoat for **photog.** elements containing)

IT 25249-59-6P, Acrylic acid-acrylonitrile-vinylidene chloride

KOROMA EIC1700

copolymer 25249-60-9P, Methylacrylate-itaconic acid-vinylidene chloride copolymer 26589-42-4P, Ethyl acrylate-itaconic acid -vinylidene chloride copolymer 88159-92-6P, Ethyl acrylate-2-hydroxyethyl acrylate-vinylidene chloride copolymer 325787-06-2P, 1,4-Butanediol-diethylene glycol-dimethylolpropionic acid -isophorone diisocyanate-Permanol KM 10-1733 copolymer 326474-65-1P, 1,4-Butanediol-dimethylolpropionic acid-isophorone diisocyanate-KM 101733 copolymer 445474-87-3P, Millester 9-55-methylene bis(4-cyclohexyl)isocyanate-methyl methacrylate-butyl acrylate-acetoacetoxyethyl methacrylate copolymer 474901-65-0P 474901-66-1P, Millester 9-55-Desmodur W-methyl methacrylate-butyl acrylate-acetoacetoxyethyl methacrylate copolymer 474901-67-2P, 1,4-Butanediol-bisphenol A-dimethylolpropionic acid-isophorone diisocyanate-Permanol KM 10-1733 copolymer 474901-68-3P, 1,4-Butanediol-PS 510-dimethylolpropionic acid-isophorone diisocyanate-Permanol KM 10-1733 copolymer  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (protective overcoat for **photog.** elements containing)

IT 374627-88-0, Chemcor 260

RL: TEM (Technical or engineered material use); USES (Uses)  
 (protective overcoat for **photog.** elements containing)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:831894 CAPLUS

DOCUMENT NUMBER: 137:343836

TITLE: **Photographic** elements coated on transparent support with reflective protective overcoat

INVENTOR(S): Donovan, Kevin Michael; Brown, Glenn Monroe; Lobo, Lloyd Anthony

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

SOURCE: Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1253467	A1	20021030	EP 2002-76473	20020415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003077546	A1	20030424	US 2001-844230	20010427
US 6586165	B2	20030701		
JP 2002365766	A2	20021218	JP 2002-126622	20020426

PRIORITY APPLN. INFO.: US 2001-844230 A 20010427

AB The present invention is a **photog.** element which includes, in order, (1) a transparent support, at least one **silver halide** emulsion layer superposed on the support, (2) optionally a

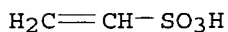
white or diffuse reflective layer, and (3) a **processing-solution**-permeable protective layer on the backside, which protective layer becomes water-resistant in the final product without lamination or fusing. The present invention is also directed to a method of making a **photog.** print involving developing the **photog.** element. The resulting print is viewed through the support, which provides protection against scratches and stains, while the polymeric overcoat provides water and stain protection to the reverse of the print where minor scratches or damage are not critical, since the image is not viewed from this side. Thus, this invention provides for a tough, stain resistant and transparent viewing surface and a stain resistant back side, which is permeable to **processing solns.**

IT 26101-52-0, Poly(ethylene sulfonic acid)  
 50851-57-5, Poly(styrene sulfonic acid)  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photog. elements coated on transparent support with  
 reflective protective overcoat containing)

RN 26101-52-0 CAPLUS  
 CN Ethenesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

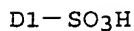
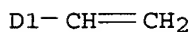
CRN 1184-84-5  
 CMF C2 H4 O3 S



RN 50851-57-5 CAPLUS  
 CN Benzenesulfonic acid, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2  
 CMF C8 H8 O3 S  
 CCI IDS



IC ICM G03C001-76

KOROMA EIC1700

- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 35, 38
- ST **photog** film transparent support reflective protective overcoat
- IT Coating materials  
Photographic films  
(**photog.** elements coated on transparent support with reflective protective overcoat)
- IT Gingiva  
Whey  
(**photog.** elements coated on transparent support with reflective protective overcoat containing)
- IT Albumins, uses  
Gelatins, uses  
Polyamides, uses  
Polycarbonates, uses  
Polyesters, uses  
Polyethers, uses  
Polyoxyalkylenes, uses  
Polyureas  
Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** elements coated on transparent support with reflective protective overcoat containing)
- IT Anhydrides  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polymer; **photog.** elements coated on transparent support with reflective protective overcoat containing)
- IT Films  
(reflective; **photog.** elements coated on transparent support with reflective protective overcoat)
- IT 64265-57-2, CX 100  
RL: TEM (Technical or engineered material use); USES (Uses)  
(crosslinker; **photog.** elements coated on transparent support with reflective protective overcoat containing)
- IT 111-46-6DP, Diethylene glycol, polymers with polycarbonate polyol, butanediol, dimethylolpropionic acid, and isophorone diisocyanate 4098-71-9DP, Isophorone diisocyanate, polymers with polycarbonate polyol, butanediol, dimethylolpropionic acid, and diethylene glycol 4767-03-7DP, Dimethylolpropionic acid, polymers with polycarbonate polyol, butanediol, diethylene glycol, and isophorone diisocyanate 25265-75-2DP, Butanediol, polymers with polycarbonate polyol, dimethylolpropionic acid, diethylene glycol, and isophorone diisocyanate  
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**photog.** elements coated on transparent support with reflective protective overcoat containing)
- IT 461676-24-4P, Butyl acrylate-Desmodur W-2,2-dimethylolpropionic acid-methyl methacrylate-millester 9-55 copolymer 473988-00-0P, Butyl acrylate-hydrogenated MDI-2,2-dimethylolpropionic acid-methyl methacrylate-millester 9-55 copolymer

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**photog.** elements coated on transparent support with reflective protective overcoat containing)

IT 9002-81-7, Poly(oxymethylene) 9002-98-6 9003-01-4, Poly(acrylic acid) 9003-05-8 9003-09-2, Poly(vinyl methyl ether) 9003-20-7D, Polyvinyl acetate, hydrolyzed 9004-54-0, Dextrans, uses 9005-25-8, Starch, uses 9005-32-7, Alginic acid 9056-77-3, Poly(ethylene glycol methacrylate) 25087-26-7, Poly(methacrylic acid) 25249-16-5 25322-68-3, Poly(ethylene oxide) 26099-09-2, Poly(maleic acid) 26101-52-0, Poly(ethylene sulfonic acid) 50851-57-5, Poly(styrene sulfonic acid) 54590-72-6, AQ 55 115965-96-3, Airvol 203 192948-73-5, Neopac R 9699 474043-82-8, NeoRez A 6092  
RL: TEM (Technical or engineered material use); USES (Uses)

(**photog.** elements coated on transparent support with reflective protective overcoat containing)

IT 13463-67-7, Titanium dioxide, uses 252238-49-6, Ropaque HP-543 285980-72-5, Ropaque OP96

RL: TEM (Technical or engineered material use); USES (Uses)  
(reflective material; **photog.** elements coated on transparent support with reflective protective overcoat containing)

IT 474043-83-9, Acusol ASE 60

RL: TEM (Technical or engineered material use); USES (Uses)  
(thickener; **photog.** elements coated on transparent support with reflective protective overcoat containing)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:750917 CAPLUS

DOCUMENT NUMBER: 137:286340

TITLE: Method for processing silver halide photographic films using developer containing ascorbic acid derivative and photographic film containing fluoro surfactant

INVENTOR(S): Uchihiro, Shinji

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002287285	A2	20021003	JP 2001-85036	20010323
PRIORITY APPLN. INFO.:			JP 2001-85036	20010323

AB The title method for processing silver halide **photog.** films by automated processing apparatus equipped with a developer tank, a fixing tank, and a washing tank uses a **photog.**



film contains an agent, which has structure  $Rf-(O-Rf')_n-L-X_m$  (  $Rf$  = F-containing alkyl, aryl, alkenyl;  $Rf'$  = f-containing alkylene;  $n, m \geq 1$  integer;  $L$  = single bond, 2-valent connecting group;  $X$  = OH, anionic group, cationic group) or  $[(RfO)_n-(PCF)-CO-Y]_k-L-X_m$  (  $Rf$  = C1-4 perfluoroalkyl;  $n$  = 1-5 integer;  $PFC$  = perfluorocycloalkylene;  $Y$  = connecting group containing O or N;  $X$  = anionic, cationic, nonionic, or amphoteric group) and a **developer solution** containing ascorbic acid derivative for preventing silver sludge generation. The method generates decreased amount of silver sludge and little soiling on processing films and is suited for automated **photog.** processing.

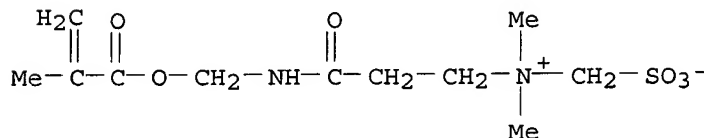
IT 466672-27-5 467233-90-5 467233-91-6  
467233-92-7

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
(fluoro surfactant in **photog.** film; method for processing silver halide **photog.** films)

RN 466672-27-5 CAPLUS  
CN 1-Propanaminium, N,N-dimethyl-3-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]amino]-3-oxo-N-(sulfomethyl)-, inner salt, polymer with 2-[2-[(1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyl)oxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethyl 2-methyl-2-propenoate (9CI)  
(CA INDEX NAME)

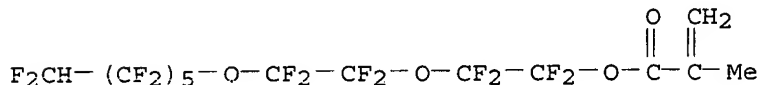
CM 1

CRN 466672-26-4  
CMF C11 H20 N2 O6 S



CM 2

CRN 443906-98-7  
CMF C14 H6 F20 O4



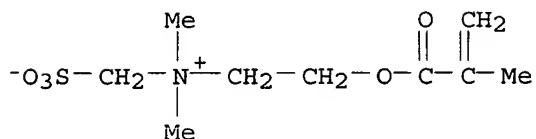
RN 467233-90-5 CAPLUS  
CN Ethanaminium, N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-N-(sulfomethyl)-, inner salt, polymer with 3-oxo-3-

[(1,1,2,2,3,3,4,4,5,5,6,6,7,7-tetradecafluoroheptyl)amino]propyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 467233-89-2

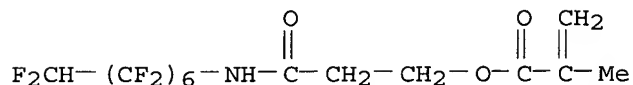
CMF C9 H17 N O5 S



CM 2

CRN 467233-88-1

CMF C14 H11 F14 N O3



RN 467233-91-6 CAPLUS

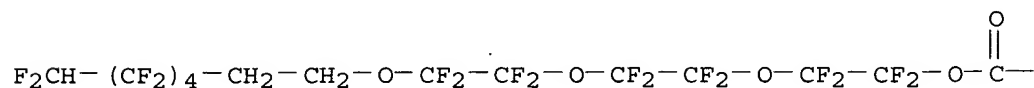
CN 2-Propenoic acid, 2-methyl-, 2-[2-[2-[(3,3,4,4,5,5,6,6,7,7-decafluoroheptyl)oxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethyl ester, polymer with 3-hydroxypropyl 2-propenoate and 3-sulfopropyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

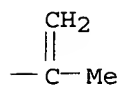
CRN 443907-10-6

CMF C17 H10 F22 O5

PAGE 1-A



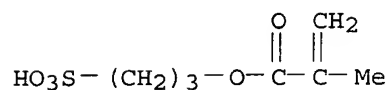
PAGE 1-B



CM 2

CRN 10548-16-0

CMF C7 H12 O5 S . Na

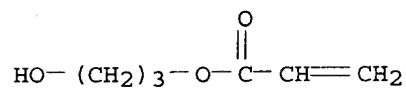


● Na

CM 3

CRN 2761-08-2

CMF C6 H10 O3



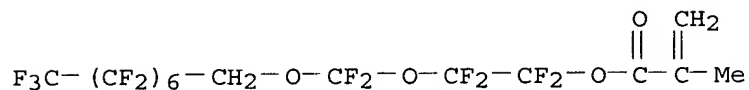
RN 467233-92-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[difluoro[(2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluorooctyl)oxy]methoxy]-1,1,2,2-tetrafluoroethyl ester, polymer with 2-(2-hydroxyethoxy)ethyl 2-methyl-2-propenoate and 2-sulfoethyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 466672-19-5

CMF C15 H7 F21 O4

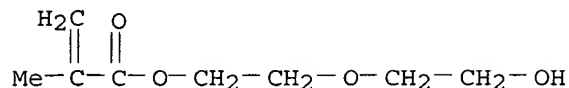


KOROMA EIC1700

CM 2

CRN 2351-43-1

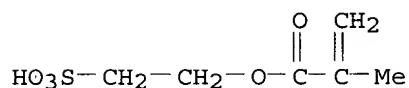
CMF C8 H14 O4



CM 3

CRN 1804-87-1

CMF C6 H10 O5 S . Na



● Na

IC ICM G03C001-043

ICS G03C001-38; G03C005-26; G03C005-30; G03C005-305

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST processing **silver halide photog** film  
developer sludge

IT **Photographic** processing  
(automated; method for processing **silver halide photog. films**)

IT Surfactants  
(fluorosurfactants; method for processing **silver halide photog. films**)

IT **Photographic** developers  
**Photographic** films  
(method for processing **silver halide photog. films**)

IT 89-65-6, **Isoascorbic acid**  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
(ascorbic acid derivative in developer; method for processing **silver halide photog. films**)

IT	439110-47-1	446027-25-4	463311-99-1	466671-95-4	466671-96-5
	466671-99-8	466672-01-5	466672-04-8	466672-06-0	466672-10-6
	466672-22-0	466672-27-5	467233-79-0	467233-80-3	

KOROMA EIC1700

467233-81-4 467233-82-5 467233-83-6 467233-84-7 467233-85-8  
 467233-87-0 467233-90-5 467233-91-6  
 467233-92-7 467248-73-3 467248-74-4 467248-75-5  
 467248-77-7 467248-79-9 467248-81-3 467248-83-5 467248-85-7  
 467248-87-9 467248-89-1

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)  
 (fluoro surfactant in photog. film; method for processing silver halide photog. films)

L15 ANSWER 5 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:734087 CAPLUS

DOCUMENT NUMBER: 137:286319

TITLE: Laser-sensitive silver halide photographic material and its processing

INVENTOR(S): Ono, Koji

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

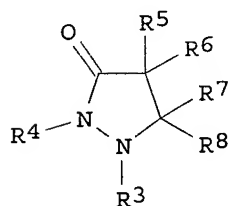
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

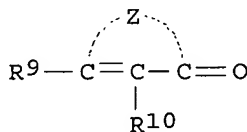
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002278013	A2	20020927	JP 2001-82666	20010322
PRIORITY APPLN. INFO.:			JP 2001-82666	20010322
OTHER SOURCE(S):		MARPAT 137:286319		

GI



I



II

AB The material comprises a support coated with (A)  $\geq 1$  Ag halide emulsion layer having optical absorption max at 700-1500 nm and (B) a non-photosensitive colloidal layer containing (1)  $[R1C(CO2L1Rf)CH2]m[R2C(CO2L2Xp)CH2]n$  ( $Rf$  = alkyl with  $\geq 1$  F atom;  $L1-2$  = linkage;  $Xp$  = H, OH, anionic, cationic, or amphoteric group;  $R1-2$  = H, lower alkyl;  $m, n$  = mol ratio;  $m + n = 1.0$ ), (2) I [ $R3$  = (un)substituted aryl;  $R4-8$  = H, alkyl, aralkyl, aryl (all may be substituted)] or II [ $R9-10$  = OH, mercapto, (un)substituted amino, acylamino, alkylsulfonylamino, arylsulfonylamino, alkoxy carbonyl, alkylthio;  $Z$  = nonmetal atoms to form (un)substituted 5- or 6-membered

ring], and (3) polyalkylene oxide nonionic surfactant on the upper side. The material is processed by 50-150 mL/m<sup>2</sup> replenishment of the developer and fixer. The material shows good antistatic, antisticking, and transporting properties and stain of the **processing soln** is prevented on low replenish development.

IT 463311-96-8 463311-98-0 463312-00-7

463933-40-6 463934-64-7

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(**photog.** film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)

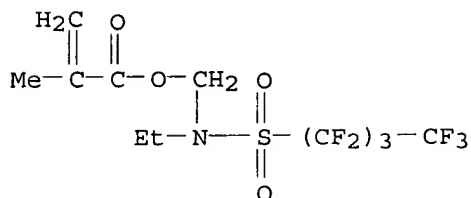
RN 463311-96-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with [ethyl[(nonafluorobutyl)sulfonyl]amino]methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 463311-94-6

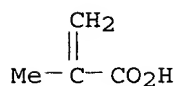
CMF C11 H12 F9 N O4 S



CM 2

CRN 79-41-4

CMF C4 H6 O2



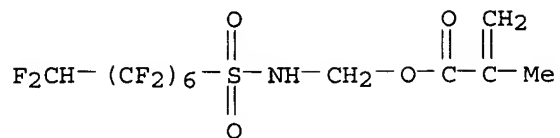
RN 463311-98-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(sulfomethoxy)ethyl ester, sodium salt, polymer with [[(1,1,2,2,3,3,4,4,5,5,6,6,7,7-tetradecafluoroheptyl)sulfonyl]amino]methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 463311-97-9

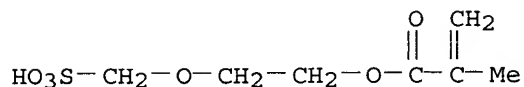
CMF C12 H9 F14 N O4 S



CM 2

CRN 443907-02-6

CMF C7 H12 O6 S . Na



● Na

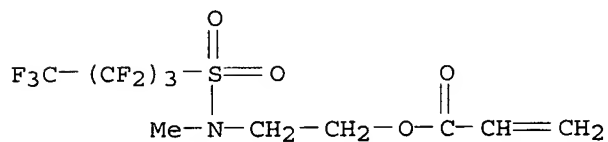
RN 463312-00-7 CAPLUS

CN 2-Propenoic acid, 2-[methyl[(nonafluorobutyl)sulfonyl]amino]ethyl ester, polymer with  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 67584-55-8

CMF C10 H10 F9 N O4 S

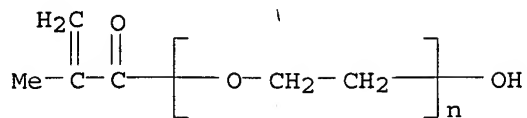


CM 2

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

CCI PMS



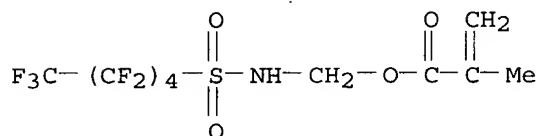
RN 463933-40-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, [[(undecafluoropentyl)sulfonyl]amino]methyl ester, polymer with  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 463933-39-3

CMF C10 H8 F11 N O4 S

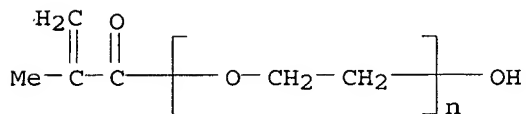


CM 2

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

CCI PMS



RN 463934-64-7 CAPLUS

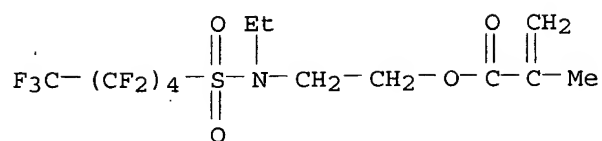
CN 2-Propenoic acid, 2-methyl-, 2-[ethyl[(undecafluoropentyl)sulfonyl]amino]ethyl ester, polymer with  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 67906-73-4

CMF C13 H14 F11 N O4 S



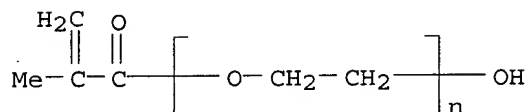


CM 2

CRN 25736-86-1

CMF (C2 H4 O)<sub>n</sub> C4 H6 O2

CCI PMS



IC ICM G03C001-12

ICS G03C001-035; G03C001-09; G03C001-76; G03C005-31; G03C005-395

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **photog** film fluoro acrylic polymer; polyalkylene oxide nonionic surfactant **photog** film; pyrazolidone cyclic enone compd  
**photog** film; low replenishment development **photog**;  
spectral sensitizer **photog** film

IT Surfactants

(nonionic; **photog**. film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)

IT **Photographic** films

(**photog**. film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)

IT 50-81-7, L-Ascorbic acid, uses 92-43-3, 1-Phenyl-3-pyrazolidone 43209-02-5 463311-96-8 463311-98-0 463312-00-7 463933-40-6 463934-64-7

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(**photog**. film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)

IT 16920-56-2

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(silver halide **photog**. emulsion containing iridium compound)

IT 96127-81-0 96962-98-0 146690-63-3 152922-97-9

RL: TEM (Technical or engineered material use); USES (Uses)

(spectral sensitizer; **photog**. film containing fluoro acrylic polymer, nonionic surfactant, and pyrazolidone or cyclic enone compound)

KOROMA EIC1700

L15 ANSWER 6 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:606638 CAPLUS

DOCUMENT NUMBER: 137:161312

TITLE: Heat-developable photographic material containing water-soluble polymer-based thickener for improved joint seam

INVENTOR(S): Nabikawa, Hitoshi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002229148	A2	20020814	JP 2001-25981	20010201
PRIORITY APPLN. INFO.:			JP 2001-25981	20010201
AB	The heat-developable photog. material comprises a Ag halide, a nonphotosensitive organic Ag salt, a reducing agent, and $\geq 1$ water-soluble polymer as a thickener, wherein the water-soluble polymer contains an acidic group. The water-soluble polymer may include polyvinyl benzoic acid, polystyrene sulfonic acid, and polystyrene phosphonic acid. The heat-developable photog. emulsion layers also contain a polymer latex such as SBR dispersible in an aqueous solvent.			
IT	9080-79-9, Sodium Polystyrene sulfonate			
	RL: TEM (Technical or engineered material use); USES (Uses) (thickener; Heat-developable photog. material containing water-soluble polymer-based thickener for improved joint seam)			
RN	9080-79-9 CAPLUS			
CN	Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX NAME)			
CM	1			
CRN	50851-57-5			
CMF	(C8 H8 O3 S)x			
CCI	PMS			
CM	2			
CRN	26914-43-2			
CMF	C8 H8 O3 S			
CCI	IDS			



D1-CH=CH<sub>2</sub>

D1-SO<sub>3</sub>H

IC ICM G03C001-498  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST heat developable **photog** emulsion film SBR latex; thickener vinyl styrene polymer heat developable **photog** emulsion  
IT Styrene-butadiene rubber, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Heat-developable **photog**. material containing water-soluble polymer-based thickener for improved joint seam)  
IT **Photographic emulsions**  
**Photographic films**  
(heat-developable; Heat-developable **photog**. material containing water-soluble polymer-based thickener for improved joint seam)  
IT 9003-55-8  
RL: TEM (Technical or engineered material use); USES (Uses)  
(styrene-butadiene rubber, Heat-developable **photog**. material containing water-soluble polymer-based thickener for improved joint seam)  
IT 9080-79-9, Sodium Polystyrene sulfonate 446062-36-8  
RL: TEM (Technical or engineered material use); USES (Uses)  
(thickener; Heat-developable **photog**. material containing water-soluble polymer-based thickener for improved joint seam)

L15 ANSWER 7 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2002:309807 CAPLUS  
DOCUMENT NUMBER: 136:348228  
TITLE: Protective epoxy overcoat that resists fingerprints, stains and spills for **photographic** elements  
INVENTOR(S): Wang, Yongcai; O'Connor, Kevin M.; Kestner, Melvin M.; Bello, James L.  
PATENT ASSIGNEE(S): Eastman Kodak Company, USA  
SOURCE: U.S., 14 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

KOROMA EIC1700

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6376160	B1	20020423	US 2000-699789	20001030
JP 2002148758	A2	20020522	JP 2001-330940	20011029
CN 1351279	A	20020529	CN 2001-137594	20011030

PRIORITY APPLN. INFO.: US 2000-699789 A 20001030

AB The overcoat comprises an epoxy material, an acid polymer, and a H2O-soluble hydrophilic binder. In 1 embodiment, a photog. element includes a support,  $\geq 1$  Ag halide emulsion layer superposed on the support and a processing-soln .-permeable overcoat overlying the Ag halide emulsion layer that becomes H2O-resistant in the final product without requiring lamination or fusing. The present invention is also directed to a method of making a print involving developing the photog. element.

IT 26101-52-0 50851-57-5

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for photog. element)

RN 26101-52-0 CAPLUS

CN Ethenesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 1184-84-5

CMF C2 H4 O3 S



RN 50851-57-5 CAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS



D1- CH=CH<sub>2</sub>

D1- SO<sub>3</sub>H

IC ICM G03C001-815  
ICS G03C001-76; G03C011-06; G03C005-26

NCL 430350000

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST protective epoxy resin overcoat **photog** diglycidyl ether dihydric phenol; polyvinyl alc polyamide hydrophilic polymer binder

IT Whey  
(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)

IT Acrylic polymers, uses  
Albumins, uses  
Gelatin, uses  
Polyesters, uses  
Polyoxyalkylenes, uses  
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)  
(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)

IT Color **photographic** paper  
(water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)

IT Epoxy resins, uses  
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)  
(water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)

IT 25805-17-8D, Poly(ethyloxazoline), derivs.  
RL: NUU (Other use, unclassified); USES (Uses)  
(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)

IT 9002-81-7, Polyoxymethylene 9002-98-6 9003-01-4 9003-05-8D, Polyacrylamide, derivs. 9003-09-2 9004-34-6D, Cellulose, ethers 9004-54-0, Dextran, uses 9005-25-8, Starch, uses 9005-32-7, Alginic acid 25087-26-7 25249-16-5 25322-68-3 25805-17-8, Poly(ethyloxazoline) 26099-09-2 26101-52-0 29690-74-2 50851-57-5  
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(hydrophilic polymer for protective epoxy overcoat that resists fingerprints and stains and spills for **photog.** element)

IT 25068-38-6, Epon 1001F

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(particles; water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)

IT 9002-89-5, Poly(vinyl alcohol) 25135-39-1, Carboset 525 29690-82-2 34306-73-5, Carboset 526 115965-96-3, Airvol 203

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(water-resistant protective epoxy overcoat for **photog.** element to resist fingerprints and stains and spills)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 8 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:709890 CAPLUS

DOCUMENT NUMBER: 135:280424

TITLE: Black-and-white **silver halide** **photographic** material containing polymer latex and hydrazine and its processing

INVENTOR(S): Arai, Takeo

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 71 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001264915	A2	20010928	JP 2000-75863	20000317
PRIORITY APPLN. INFO.:			JP 2000-75863	20000317
OTHER SOURCE(S): MARPAT 135:280424				

AB The material comprises a support having thereon (A)  $\geq 1$  emulsion layer containing (1) 0.010-5 g/m<sup>2</sup> inorg. particles or complex latex comprising the inorg. particles and an organic polymer and (2) 0.010-2.0 g/m<sup>2</sup> polymer latex with glass transition temperature  $\leq 10^\circ$  and (B)  $\geq 1$  hydrophilic colloid layer containing  $\geq 1$  hydrazine compound, where gelatin content in a Ag halide emulsion layer-containing side on the support is  $\leq 2.5$  g/m<sup>2</sup>. It is **processed** with a **solution** containing a **developing** agent R1(OM1)C:C(OM2)XkR2 [R1, R2 = each (un)substituted alkyl, alkoxy, and alkylthio; R1 and R2 may form a ring; k = 0, 1; upon k = 1, X = CO, CS; M1, M2 = H, alkali metal atom]. It showed improved pressure, crack, and blackening resistance and high contrast.

IT 362630-88-4

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(**photog.** emulsion containing complex latex and polymer latex)

RN 362630-88-4 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, ethenyl ester, polymer with ethenylbenzene and 2-methyl-1,3-butadiene-1-sulfonic acid, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 362630-87-3

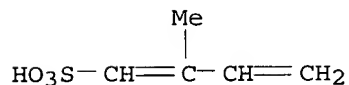
CMF (C8 H8 . C7 H12 O2 . C5 H8 O3 S)x

CCI PMS

CM 2

CRN 154025-29-3

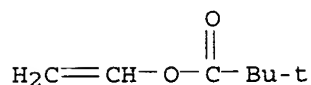
CMF C5 H8 O3 S



CM 3

CRN 3377-92-2

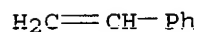
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-06

ICS G03C001-04; G03C001-047; G03C001-18; G03C001-26; G03C001-91;  
G03C005-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photog emulsion polymer latex inorg particle; hydrazine black  
white photog film; ascorbic acid deriv photog  
developer

IT Photographic developers

(**photog.** developer containing ascorbic acid derivative)  
IT **Photographic emulsions**  
(**photog.** emulsion containing complex latex and polymer latex)  
IT **Photographic films**  
(**photog.** film containing hydrazine complex latex, and polymer latex)  
IT **Photographic sensitizers**  
(**photog.** film containing hydrazine, complex latex, and polymer latex)  
IT 6381-77-7, Sodium erythorbate  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** developer containing ascorbic acid derivative)  
IT 9002-85-1, Poly(vinylidene chloride) 9003-32-1, Poly(ethyl acrylate)  
9003-49-0, Poly(butyl acrylate) 9003-53-6, Polystyrene 362630-86-2  
362630-88-4 362630-89-5 362630-91-9  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(**photog.** emulsion containing complex latex and polymer latex)  
IT 210694-55-6  
RL: DEV (Device component use); USES (Uses)  
(**photog.** film containing hydrazine, complex latex and polymer latex)  
IT 23368-55-0 165809-77-8 166888-42-2 173592-90-0 174214-41-6  
224177-92-8 228121-19-5 253869-55-5 311761-77-0 362630-92-0  
362630-93-1 362630-94-2 362630-95-3 362630-96-4 362630-97-5  
362630-98-6  
RL: DEV (Device component use); USES (Uses)  
(sensitizer; **photog.** emulsion containing complex latex and polymer latex)

L15 ANSWER 9 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:829370 . CAPLUS

DOCUMENT NUMBER: 134:23430

TITLE: Protective overcoat comprising interpenetrating network for **photographic** elements

INVENTOR(S): Nair, Mridula; Jones, Tamara K.; Lobo, Lloyd A.; Schell, Brian A.

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

SOURCE: U.S., 16 pp., Cont.-in-part of U.S. 6,077,648.  
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6153363	A	20001128	US 1999-447409	19991123
US 6077648	A	20000620	US 1999-235436	19990122

PRIORITY APPLN. INFO.: US 1999-235436 A2 19990122

AB The present invention is a **photog.** element which includes a support, at least one **silver-halide** emulsion layer



superposed on the support and a **processing-soln**  
 .-permeable protective overcoat overlying the **silver**  
**halide** emulsion layer. The **processing-soln**  
 .-permeable overcoat is composed of a polyurethane-containing component having  
**acid** functionalities wherein the polyurethane-containing component is  
 an interpenetrating network further comprising at least two polymers,  
 including at least one vinyl polymer and at least one urethane polymer.  
 Suitably, a water-soluble polymer is also present in the overcoat. The  
 present invention is also directed to a method of making a **photog**  
 . print involving developing the **photog.** element in an alkaline  
**developer solution**

IT 313361-25-0P 314080-86-9P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)

(protective overcoat comprising interpenetrating network for  
**photog.** elements)

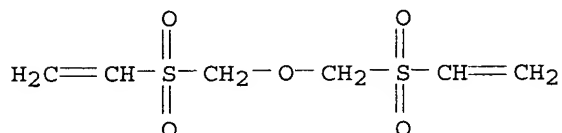
RN 313361-25-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl  
 2-propenoate, 1,6-hexanediyl di-2-propenoate and 1,1'-  
 [oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 26750-50-5

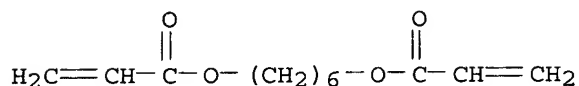
CMF C6 H10 O5 S2



CM 2

CRN 13048-33-4

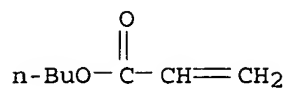
CMF C12 H18 O4



CM 3

CRN 141-32-2

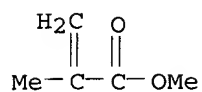
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



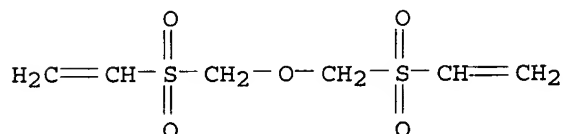
RN 314080-86-9 CAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 1,1'-[oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 26750-50-5

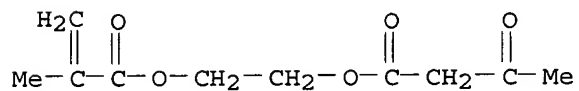
CMF C6 H10 O5 S2



CM 2

CRN 21282-97-3

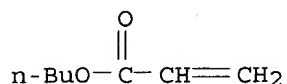
CMF C10 H14 O5



CM 3

CRN 141-32-2

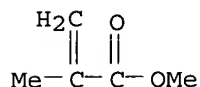
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



- IC ICM G03C001-815
- ICS G03C001-89; G03C001-76; G03C011-08
- NCL 430350000
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 35, 38, 42
- ST **photog** paper overcoat protective layer urethane vinyl polymer; development **photog** paper
- IT Vinyl compounds, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polymers; protective overcoat comprising interpenetrating network for **photog.** elements)
- IT Coating materials  
(protective overcoat comprised of polyurethane-vinyl polymer interpenetrating networks for **photog.** paper)
- IT Interpenetrating polymer networks  
**Photographic** development  
**Photographic** paper  
(protective overcoat comprising interpenetrating network for **photog.** elements)
- IT Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(protective overcoat comprising interpenetrating network for **photog.** elements)
- IT 9002-89-5  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in protective overcoat comprised of polyurethane-vinyl polymer interpenetrating networks for **photog.** paper)
- IT 313361-25-0P 314080-86-9P 327615-58-7P 327615-77-0P  
327615-84-9P 327615-86-1P  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(protective overcoat comprising interpenetrating network for  
**photog.** elements)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:808609 CAPLUS

DOCUMENT NUMBER: 133:367790

TITLE: Overcoat for reticulation control in  
**photographic** elements

INVENTOR(S): Nair, Mridula; Lobo, Lloyd Anthony; Jones, Tamara Kay

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1052542	A1	20001115	EP 2000-201558	20000501
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6153362	A	20001128	US 1999-313556	19990514
JP 2000347348	A2	20001215	JP 2000-147505	20000515

PRIORITY APPLN. INFO.: US 1999-313556 A 19990514

AB A **photog.** element containing a support; at least two contiguous layers, at least one of which is a **silver halide** emulsion layer superposed on a side of said support; a **processing solution** permeable protective overcoat containing a urethane-vinyl copolymer having **acid** functionalities wherein a weight ratio of a urethane component in the copolymer comprises from 20 to 100 percent and a weight ratio of a vinyl component in the copolymer comprises from 0 to 80 percent; a crosslinker for the said copolymer; and a second polymer selected from the group consisting of polyvinyl alc., cellulose ethers, n-vinyl amides, polyesters, poly(ethylene oxide), starch, proteins, whey, albumin, poly(acrylic **acid**), alginates and gums overlying the said at least two contiguous layers; and wherein the ratio of the gelatin to non-gelatin content of the dried layers immediately underlying the uppermost gelatin layer is less than 1.3 with the proviso that the water content of the wet coating of all the gelatin layers prior to drying is at a coverage of greater than 53 g/m<sup>2</sup>.

IT 313361-25-0P

RI: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyurethane interpenetrating networks; overcoat for reticulation control in **photog.** elements)

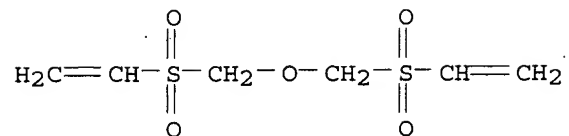
RN 313361-25-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 1,6-hexanediyl di-2-propenoate and 1,1'-[oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 26750-50-5

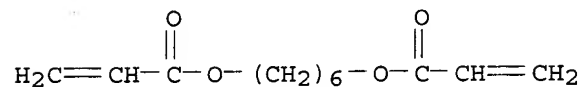
CMF C6 H10 O5 S2



CM 2

CRN 13048-33-4

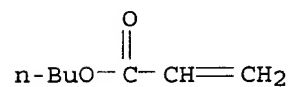
CMF C12 H18 O4



CM 3

CRN 141-32-2

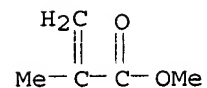
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



IC ICM G03C001-76

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and

KOROMA EIC1700

Other Reprographic Processes)  
 Section cross-reference(s): 35, 38, 42  
 ST **photog** paper overcoat polyurethane polyacrylate  
 IT Polyurethanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (acrylates; overcoat for reticulation control in **photog.**  
 elements)  
 IT Coating materials  
**Photographic** paper  
 (overcoat for reticulation control in **photog.** elements)  
 IT Interpenetrating polymer networks  
 (polyacrylate-polyurethane; overcoat for reticulation control in  
**photog.** elements)  
 IT 327615-58-7P 327615-77-0P  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (overcoat for reticulation control in **photog.** elements)  
 IT 115965-96-3, Airvol 203 192948-73-5, NeoPac R 9699  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (overcoat for reticulation control in **photog.** elements)  
 IT 313362-62-8P  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (polyacrylate interpenetrating networks; overcoat for reticulation  
 control in **photog.** elements)  
 IT **313361-25-0P**  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (polyurethane interpenetrating networks; overcoat for reticulation  
 control in **photog.** elements)  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:415468 CAPLUS

DOCUMENT NUMBER: 133:36022

TITLE: Protective overcoat for **photographic**  
 elements

INVENTOR(S): Nair, Mridula; Jones, Tamara K.; Lobo, Lloyd A.;  
 Schell, Brian A.

PATENT ASSIGNEE(S): Eastman Kodak Co., USA

SOURCE: U.S., 9 pp.  
 CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6077648	A	20000620	US 1999-235436	19990122
US 6153363	A	20001128	US 1999-447409	19991123

EP 1022610 A1 20000726 EP 2000-200090 20000112

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: US 1999-235436 A2 19990122

AB The present invention is a **photog.** element which includes a support, a **silver halide** emulsion layer superposed on the support and a **processing solution** permeable protective overcoat overlying the **silver halide** emulsion layer. The **processing solution** permeable overcoat is composed of a urethane-vinyl copolymer having **acid** functionalities wherein a weight ratio of the urethane in the copolymer comprises from 20-100 % and a weight ratio of the vinyl in the copolymer comprises from 0-80 %. The present invention is a method of making a **photog.** element which includes providing an **photog.** element having a support, a **silver halide** emulsion layer superposed on the support and a **processing solution** permeable protective overcoat overlying the **silver halide** emulsion layer. The **processing solution** permeable overcoat is composed of a urethane-vinyl copolymer having **acid** functionalities wherein a weight ratio of the urethane in the polymer comprises from 20-100 % and a weight ratio of the vinyl in the polymer comprises from 0 to 80 percent. The **photog.** element is developed in a **developer solution** having a pH greater than 7 and the **processing solution** permeable overcoat is fused.

IT 313361-25-0P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyurethane interpenetrating networks; protective overcoat for **photog.** elements)

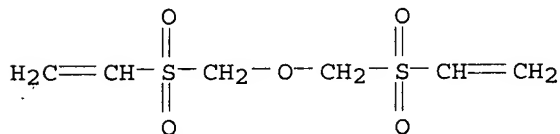
RN 313361-25-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 1,6-hexanediyl di-2-propenoate and 1,1'-[oxybis(methylenesulfonyl)]bis[ethene] (9CI) (CA INDEX NAME)

CM 1

CRN 26750-50-5

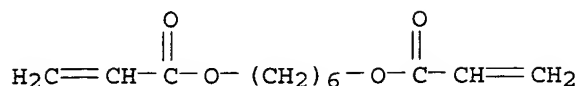
CMF C6 H10 O5 S2



CM 2

CRN 13048-33-4

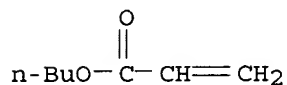
CMF C12 H18 O4



CM 3

CRN 141-32-2

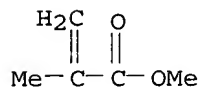
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



IC ICM G03C005-29

ICS G03C001-76; G03C011-06

NCL 430350000

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 42

ST protective overcoat **photog** element

IT Polyurethanes, preparation

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylates; protective overcoat for **photog.** elements)

IT Interpenetrating polymer networks

(polyacrylate-polyurethane; protective overcoat for **photog.** elements)

IT Coating materials

**Photographic** films

(protective overcoat for **photog.** elements)

IT 306997-10-4P 309269-39-4P 313362-62-8P 313364-59-9P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

KOROMA EIC1700



(polyacrylate interpenetrating networks; protective overcoat for  
photog. elements)

IT 313361-25-0P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(polyurethane interpenetrating networks; protective overcoat for  
photog. elements)

IT 165245-61-4, Flexthane 620 192948-73-5, NeoPac R 9699 194944-48-4,  
NeoCryl A 5090 200415-08-3, NeoRez 9679

RL: TEM (Technical or engineered material use); USES (Uses)  
(protective overcoat for photog. elements)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 12 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:277494 CAPLUS

DOCUMENT NUMBER: 130:344984

TITLE: Silver halide photographic  
photosensitive material and processing thereof

INVENTOR(S): Ishikawa, Wataru

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11119367	A2	19990430	JP 1997-280456	19971014
PRIORITY APPLN. INFO.:			JP 1997-280456	19971014
OTHER SOURCE(S): MARPAT 130:344984				

AB In the title material possessing  $\geq 1$  Ag halide emulsion  
layer and  $\geq 1$  hydrophilic colloid layer on a support and containing  
 $\geq 1$  polymer latex,  $\geq 1$  of the emulsion and/or colloid layers  
is hardened with  $\geq 1$  hardener (CH<sub>2</sub>:CHSO<sub>2</sub>CH<sub>2</sub>CONR<sub>1</sub>)<sub>2</sub>An<sub>1</sub>,  
N,N',N''-tris(vinylmethylcarbonyl)hexahydrotriazine, or  
CH<sub>2</sub>:CHSO<sub>2</sub>CHR<sub>2</sub>(OCHR<sub>3</sub>)<sub>n2</sub>SO<sub>2</sub>CH:CH<sub>2</sub> (R<sub>1</sub> = H or C<sub>1</sub>-4 alkyl, 2 R<sub>1</sub> groups are  
the same or different; R<sub>2</sub>, R<sub>3</sub> = H, alkyl, aralkyl, aryl; A = divalent  
group; n<sub>1</sub>, n<sub>2</sub> = 0 or 1) and the pH value of the coating solution of  
 $\geq 1$  of the emulsion and/or colloid layers or that of the coating  
surface is 6.5-10. The material is processed following exposure by using  
an automatic processor in which the replenishment rates of the  
developing solution and fixing solution are 50-150  
and 100-300 mL/m<sup>2</sup> material, resp. The material for printing platemaking  
shows stable sensitivity and prevents pepper fog and the formation of  
Ag sludge in running process using a low replenishment rate and  
exhibits good drying properties and scratch resistance in rapid  
processing.

IT 224582-02-9

RL: DEV (Device component use); MOA (Modifier or additive use); USES

(Uses)

(photog. film containing vinylsulfone derivative hardener and polymer latex)

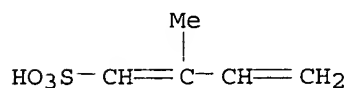
RN 224582-02-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with ethenylbenzene, oxiranylmethyl 2-methyl-2-propenoate and sodium 2-methyl-1,3-butadiene-1-sulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 120129-07-9

CMF C5 H8 O3 S . Na

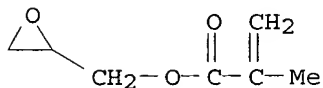


● Na

CM 2

CRN 106-91-2

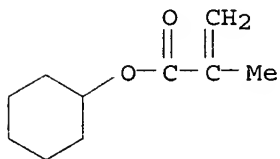
CMF C7 H10 O3



CM 3

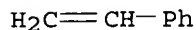
CRN 101-43-9

CMF C10 H16 O2



CM 4

CRN 100-42-5  
CMF C8 H8



IC ICM G03C001-30  
ICS G03C001-04; G03C001-047; G03C001-06; G03C001-74; G03C005-395  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST **photog** hardener vinylsulfone deriv; polymer latex **photog** film  
IT **Photographic** processing  
(automatic processing of **photog.** film containing vinylsulfone derivative **photog.** hardener)  
IT **Photographic** films  
**Photographic** hardening agents  
(**photog.** film containing vinylsulfone derivative hardener and polymer latex)  
IT 7631-86-9, Silica, uses 25586-20-3, Acrylic **acid**-butyl acrylate-styrene copolymer 66710-66-5 105532-31-8 136577-43-0 161195-83-1, Cyclohexyl methacrylate-glycidyl methacrylate-nonyl acrylate copolymer 224582-00-7 **224582-02-9**  
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(**photog.** film containing vinylsulfone derivative hardener and polymer latex)

L15 ANSWER 13 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:624003 CAPLUS  
DOCUMENT NUMBER: 129:237697  
TITLE: A correcting agent for a **silver** imaged lithographic printing plates  
INVENTOR(S): Deprez, Lode  
PATENT ASSIGNEE(S): Agfa-Gevaert N.V., Belg.  
SOURCE: Eur. Pat. Appl., 17 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 864928	A1	19980916	EP 1998-200421	19980210
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 10254126	A2	19980925	JP 1998-71194	19980306
PRIORITY APPLN. INFO.:			EP 1997-200722	19970311
AB A bleach-fixing agent for making corrections on <b>silver</b> imaged lithog. printing plates, which work according to the <b>silver</b> salt				

KOROMA EIC1700

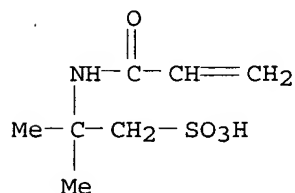
diffusion transfer reversal mechanism, is disclosed. By limiting the amount of volatile organic solvents, having a b.p. lower than 100°, comprised in the correcting agent, to a value not higher than 20% by volume and by adjusting the viscosity of same correcting agent to a value higher than 3 mPas, an improved correcting agent is obtained which is characterized by both a short deletion time, required to convert the undesired oleophilic printing areas into hydrophilic ink-rejecting areas, as well as a short drying time of the correcting agent after being applied to the printing plate's surface.

IT 40623-73-2, Acrylamide-2-acrylamido-2-methylpropanesulfonic acid copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (correcting solns. for lithog. printing plates by  
 silver salt diffusion transfer reversal process containing)  
 RN 40623-73-2 CAPLUS  
 CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

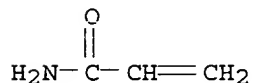
CMF C7 H13 N O4 S



CM 2

CRN 79-06-1

CMF C3 H5 N O



IC ICM G03F007-06  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST silver lithog plate correction bleach fixing  
 IT Photographic processing  
 (bleach-fixing solns. with limiting amount of volatile organic solvents for correcting silver lithog. plates)  
 IT Diffusion-transfer photographic films

(**photog.** bleach-fixing **solns.** with limiting amount of volatile organic solvents for correcting lithog. plates from)

IT Lithographic plates

(**silver**; **photog.** bleach-fixing **solns.**

with limiting amount of volatile organic solvents for correcting)

IT 64-02-8, Tetrasodium ethylenediaminetetraacetate 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 77-92-9, Citric acid, uses 107-98-2, 1-Methoxy-2-propanol 1310-73-2, Sodium hydroxide, uses 6440-06-8, 1H-1,2,3-Triazole-4-thiol 7757-83-7, Sodium sulfite 7783-18-8, Ammonium thiosulfate 21265-50-9, Ammonium ferric ethylenediaminetetraacetate 39354-52-4, Ambiteric H 40623-73-2, Acrylamide-2-acylamido-2-methylpropanesulfonic acid copolymer 53320-86-8, Laponite RD

RL: TEM (Technical or engineered material use); USES (Uses)

(correcting **solns.** for lithog. printing plates by

**silver** salt diffusion transfer reversal process containing)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 14 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:605082 CAPLUS

DOCUMENT NUMBER: 129:209267

TITLE: **Silver halide** material for optical memory device with luminescent reading and method for treatment thereof

INVENTOR(S): Levich, Eugene B.; Malkin, Jacob N.; Alperovich, Mark A.; Shapiro, Boris M.

PATENT ASSIGNEE(S): Trid Store Inc., USA

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9837456	A1	19980827	WO 1998-US3540	19980224
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9866650	A1	19980909	AU 1998-66650	19980224
EP 963571	A1	19991215	EP 1998-908681	19980224
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
US 6265140	B1	20010724	US 1998-28932	19980224
US 2002115026	A1	20020822	US 2002-886979	20020115

IT Graphic arts  
 (silver halide photog. emulsions for  
 forming luminescent particles for three-dimensional displays in)

IT 3654-76-0 18244-78-5 23178-66-7 28413-71-0 36528-80-0 54118-16-0  
 127635-66-9 212209-94-4  
 RL: DEV (Device component use); NUU (Other use, unclassified); TEM  
 (Technical or engineered material use); USES (Uses)  
 (in preparation of silver halide photog.  
 emulsions for forming luminescent particles for optical memory devices)

IT 9002-89-5, Poly(vinyl alcohol) 9003-39-8, Poly(vinylpyrrolidone)  
 9004-32-4 9004-38-0, Cellulose acetophthalate 25191-25-7,  
 Poly(vinyl sulfate) 25897-89-6D, Polydiacetoneacrylamide,  
 graft copolymers with gelatins 26949-19-9D, Poly-N,N'-  
 methylenediacrylamide, graft copolymers with gelatins 65744-44-7D, graft  
 copolymers with gelatins  
 RL: DEV (Device component use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (in preparation of silver halide photog.  
 emulsions for forming luminescent particles for optical memory devices)

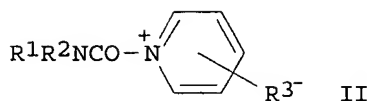
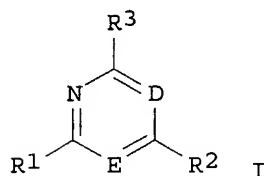
IT 86-93-1, 1-Phenyl-5-mercaptotetrazole 95-14-7, 1H-Benzotriazole  
 148-24-3, 8-Hydroxyquinoline, uses 149-30-4, 2-Mercaptobenzothiazole  
 333-20-0, Potassium thiocyanate 583-39-1, 2-Mercaptobenzimidazole  
 1313-82-2, Sodium sulfide (Na<sub>2</sub>S), uses 2321-07-5, Fluorescein  
 2382-96-9, 2-Mercaptobenzoxazole 3251-23-8 7789-42-6, Cadmium bromide  
 13494-90-1, Gallium trinitrate 13746-66-2, Tripotassium hexacyanoferrate  
 16423-68-0, Erythrosine 39201-42-8 64339-18-0, Rhodamine 101  
 84522-13-4, Methylcalcein 190517-63-6 212209-95-5  
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material  
 use); USES (Uses)  
 (in processing solns. for silver  
 halide photog. emulsions for forming luminescent  
 particles for optical memory devices)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1998:600234 CAPLUS  
 DOCUMENT NUMBER: 129:283385  
 TITLE: Processing of tetrazolium-containing silver  
 halide photographic material with  
 mercapto compound-containing developer to improve  
 characteristic and dot quality  
 INVENTOR(S): Yasuda, Shoji  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10246935      A2      19980914      JP 1997-49467      19970304  
PRIORITY APPLN. INFO.:      JP 1997-49467      19970304  
GI



AB Claimed method for processing **photog.** material having a supported **Ag** halide emulsion layer comprises imagewise exposure followed by **development** with a **developer soln** . containing a N-containing heterocyclic compound I (D, E = N, -CH:, -CR0:, N; R0 = substituent; R1-3 = H, halo, substituent combined with the 6-membered ring through N, O, S, or C atom;  $\geq 1$  of the substituents has SM group; M = H, alkali metal, ammonium), where the **photog.** material contains a heavy metal selected from Ir, Ru, Rh, Re, and Cr, a tetrazolium compound, and an optional dye with optical d.  $\geq 0.2$  at 360 nm in the emulsion layer, and the **photog.** material has **Ag** /thickness ratio of  $\geq 0.6$  in the emulsion layer, the protective layer thickness of  $\leq 1.2 \mu\text{m}$ ,  $\leq 5.0 \mu\text{m}$  the total thickness of the coated layer on the emulsion side, and  $\leq 120\%$  the swell ratio of the coated layer. In the method,  $\geq 1$  hydrophilic colloid layer may be crosslinked with an urea derivative II (R1, R2 = alkyl, aryl; R1 and R2 may form a ring; R3 = LXSO3-, **acidic** substituent; L = none, divalent group; X = none, O, NR4; R4 = H, alkyl, aryl) or contain gelatin-stabilized polymer latex. The method is suitably applied to **photomech.** process, and provides developed image with good quality and dot tone. The **developer solution** does not generate **Ag** sludges. Thus, a black-and-white **photog** . film for **photomech.** use containing N-(N',N'-diethylaminocarbonyl)-3-sulfonypyridinium and strongly hardened with an urea derivative was processed by a developer containing 2-(N-phenyl-N-carboxymethyl-amino)-4,6-dimercapto-1,3,5-triazine to obtain images with the mentioned advantages.

IT 154217-46-6, Styrene-methyl methacrylate-ethyl acrylate-sodium 2-methyl-2-acrylamidopropanesulfonate copolymer  
RL: DEV (Device component use); MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (latex; development of tetrazolium-containing **Ag** halide **photog.** material with mercapto compound-containing developer to improve characteristic and dot quality)

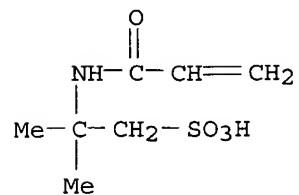
RN 154217-46-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

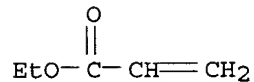


● Na

CM 2

CRN 140-88-5

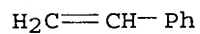
CMF C5 H8 O2



CM 3

CRN 100-42-5

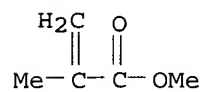
CMF C8 H8



CM 4

CRN 80-62-6

CMF C5 H8 O2



KOROMA EIC1700



IC ICM G03C005-29  
ICS G03C001-035; G03C001-04; G03C001-06; G03C001-09; G03C001-30;  
G03C001-36; G03C001-76; G03C001-815; G03C005-30; G03C005-305;  
G03C005-31

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

ST tetrazolium heavy metal **photog** film development;  
mercaptotriazine **photog** developer; mercaptopyrimidine  
**photog** developer; urea hardener **photog** film development

IT **Photographic developers**  
**Photographic development**  
**Photographic films**  
(development of tetrazolium-containing **Ag** halide **photog**  
. material with mercapto compound-containing developer to improve  
characteristic and dot quality)

IT 13845-07-3 14854-54-7, Potassium pentachloronitrosylruthenate(III)  
RL: DEV (Device component use); MOA (Modifier or additive use); PEP  
(Physical, engineering or chemical process); PROC (Process); USES (Uses)  
(development of tetrazolium-containing **Ag** halide **photog**  
. material with mercapto compound-containing developer to improve  
characteristic and dot quality)

IT 104497-79-2  
RL: DEV (Device component use); PEP (Physical, engineering or chemical  
process); PROC (Process); USES (Uses)  
(development of tetrazolium-containing **Ag** halide **photog**  
. material with mercapto compound-containing developer to improve  
characteristic and dot quality)

IT 175161-86-1 194982-72-4  
RL: PEP (Physical, engineering or chemical process); TEM (Technical or  
engineered material use); PROC (Process); USES (Uses)  
(development of tetrazolium-containing **Ag** halide **photog**  
. material with mercapto compound-containing developer to improve  
characteristic and dot quality)

IT 14542-06-4 94266-02-1  
RL: DEV (Device component use); PEP (Physical, engineering or chemical  
process); PROC (Process); USES (Uses)  
(dye; development of tetrazolium-containing **Ag** halide  
**photog**. material with mercapto compound-containing developer to  
improve characteristic and dot quality)

IT 139486-50-3 148681-23-6 161032-15-1  
RL: DEV (Device component use); MOA (Modifier or additive use); PEP  
(Physical, engineering or chemical process); PROC (Process); USES (Uses)  
(film hardener; development of tetrazolium-containing **Ag** halide  
**photog**. material with mercapto compound-containing developer to  
improve characteristic and dot quality)

IT 25085-39-6, Acrylic acid-butadiene-styrene copolymer  
154217-46-6, Styrene-methyl methacrylate-ethyl acrylate-sodium  
2-methyl-2-acrylamidopropanesulfonate copolymer  
RL: DEV (Device component use); MOA (Modifier or additive use); PEP  
(Physical, engineering or chemical process); PROC (Process); USES (Uses)  
(latex; development of tetrazolium-containing **Ag** halide

**photog.** material with mercapto compound-containing developer to improve characteristic and dot quality)

L15 ANSWER 16 OF 61 CAPLUS COPYRIGHT 2003 ACS bn STN

ACCESSION NUMBER: 1998:335110 CAPLUS

DOCUMENT NUMBER: 129:73984

TITLE: **Silver halide photographic**  
material containing hydrazine and gelatin-interacting compound, its process and the image-forming method

INVENTOR(S): Muramatsu, Yasuhiko

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 73 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10133317	A2	19980522	JP 1996-292617	19961105
PRIORITY APPLN. INFO.:			JP 1996-292617	19961105

AB Claimed **photog.** material having a **Ag** halide emulsion layer on a support contains a hydrazine derivative and an amine having a functional group or the precursor which reacts with the amino or carboxy group in the side chain of the gelatin mol. The amine or the precursor has the structure  $AmLnR1nR2R3$  (I; A = functional group or the precursor stated above; R1 = alkylene, alkenylene, arylene; R2 and R3 = H, alkyl, alkenyl, aryl; L = linkage group; m = 0, 1; n = 1-4). Also claimed is the method for processing the material by an automatic processor using a reductone-containing **developer solution** of pH of 9.0-10.9 with the replenishing rate of 30-200 L/m<sup>2</sup>. Further claimed is the image-forming method comprising developing the **photog.** material with a solid processing chemical. It provides an image with low fog, low black pepper d. and high contrast, even by the low pH **developer solution**. It also has a good processing stability. Suitable compds. I are N-(vinylsulfo-ethyl)diethylamine, N-(vinylsulfo-ethoxyethyl)diethylamine, N-[1-ethyl-1-(4-ethyleneiminocarbonylamino)phenoxy]diethyl amine, n-[epoxymethoxy(triethoxy)ethyl]diethylamine, etc., and suitable reductone added to the developer as the developing agent is an ascorbic acid derivative

IT 208936-76-9

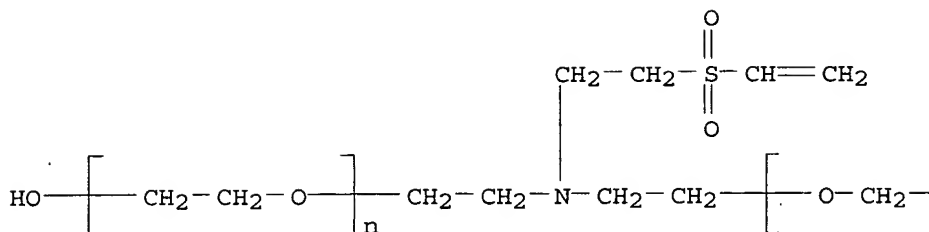
RL: DEV (Device component use); USES (Uses)

(**photog.** material containing hydrazine and gelatin-interacting amine compound for **photomech.** use)

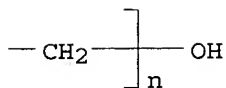
RN 208936-76-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl),  $\alpha, \alpha'$ -[[[2-(ethenylsulfonyl)ethyl]imino]di-2,1-ethanediyl]bis[ $\omega$ -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM G03C001-06  
ICS G03C001-295; G03C005-26; G03C005-29; G03C005-30; G03C005-31  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST **photomech** process **photog** material; hydrazine deriv additive **photog** material; amine compd additive **photog** material; epoxyalkylamine hardener additive **photog** material; vinylsulfone hardener additive **photog** material; ethyleneimine hardener additive **photog** material; reductone developing agent **photog** processing  
IT **Photographic** development  
(development of **photog.** material containing hydrazine and gelatin-interacting amine compound by low-pH **developer solution**)  
IT Lithographic films (**photographic**)  
(**photog.** material containing hydrazine and gelatin-interacting amine compound for **photomech.** use)  
IT Amines, uses  
RL: DEV (Device component use); USES (Uses)  
(**photog.** material containing hydrazine and gelatin-interacting amine compound for **photomech.** use)  
IT 50-81-7, Ascorbic acid, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(developing agent; development of **photog.** material containing hydrazine and gelatin-interacting amine compound by low-pH **developer solution**)  
IT 17700-22-0 197900-28-0 208936-75-8 208936-76-9 208936-77-0  
208936-78-1 208936-79-2 208936-80-5 208936-81-6 208936-82-7

208936-83-8    208936-85-0    208936-86-1    208936-87-2    208936-88-3  
 208936-89-4    208936-90-7    208936-91-8    208936-92-9    208936-93-0  
 208936-94-1    208936-95-2    208936-96-3    208936-97-4    208936-98-5  
 208936-99-6

RL: DEV (Device component use); USES (Uses)  
 (photog. material containing hydrazine and gelatin-interacting  
 amine compound for photomech. use)

L15 ANSWER 17 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:119210 CAPLUS  
 DOCUMENT NUMBER: 128:210812  
 TITLE: **Silver halide photographic**  
 material and image formation using it  
 INVENTOR(S): Ishikawa, En  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 86 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10048765	A2	19980220	JP 1996-207190	19960806
US 5985530	A	19991116	US 1997-900997	19970725
EP 823656	A2	19980211	EP 1997-113459	19970804
EP 823656	A3	19980415		
EP 823656	B1	20020410		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: JP 1996-207190 A 19960806  
 JP 1996-208286 A 19960807

AB The title material possesses, on a support, 3-10 layers  $\geq 1$  of which  
 is a **photosensitive Ag** halide emulsion layer having a  
 spectral sensitization max at 600-900 nm and  $\geq 1$  of which is a  
 hydrophilic colloid layer and contains a composite latex comprising inorg.  
 particles and a hydrophobic polymer in the emulsion layer and/or the  
 colloid layer and  $\geq 1$  lubricant, water-soluble polymer, latex,  
 lipophilic component and/or mat agent in the colloid layer. The material  
 is imagewise exposed and **processed** with a **developing**  
**solution** of pH 9.5-11.0 to form a high contrast image with  $\gamma$   
 value 10-30. The material for printing platemaking shows good scratch  
 resistance, anti-cracking properties, anti-curling properties, and drying  
 properties upon rapid processing.

IT 178182-08-6

RL: DEV (Device component use); MOA (Modifier or additive use); USES  
 (Uses)

(**photog.** film containing lubricant and composite latex containing  
 hydrophobic polymer and inorg. particle)

RN 178182-08-6 CAPLUS

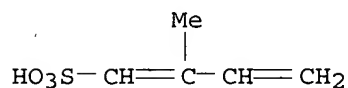
CN 1,3-Butadiene-1-sulfonic acid, 2-methyl-, sodium salt, polymer with

ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 120129-07-9

CMF C5 H8 O3 S . Na

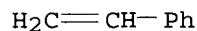


● Na

CM 2

CRN 100-42-5

CMF C8 H8



IC ICM G03C001-04

ICS G03C001-047; G03C001-06; G03C001-12; G03C001-38; G03C001-43;  
G03C005-29

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

ST **photog** film composite polymer latex; lubricant **photog**  
film; matt agent **photog** film

IT Lubricants

**Photographic films**

(**photog.** film containing lubricant and composite latex containing  
hydrophobic polymer and inorg. particle)

IT Polysiloxanes, uses

RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)

(**photog.** film containing lubricant and composite latex containing  
hydrophobic polymer and inorg. particle)

IT 25586-20-3, Acrylic acid-butyl acrylate-styrene copolymer

RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)

(lipophilic component; **photog.** film containing lubricant and  
composite latex containing hydrophobic polymer and inorg. particle)

IT 9011-14-7, Poly(methyl methacrylate)

RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)

(matt agent; **photog.** film containing lubricant and composite

latex containing hydrophobic polymer and inorg. particle)  
 IT 7631-86-9, Silica, uses 9003-39-8, Poly(vinylpyrrolidone) 9004-54-0, Dextran, uses 9011-09-0, Butyl acrylate-1,1-dichloroethylene copolymer 26355-01-1, 2-Hydroxyethyl methacrylate-methyl methacrylate copolymer 31900-57-9D, Dimethylsilanediol homopolymer, trimethylsilyl-terminated 42557-10-8, Dimethylsiloxane, trimethylsilyl-terminated 66218-20-0, Cyclohexyl methacrylate-glycidyl methacrylate copolymer 178182-08-6 204077-29-2, Cyclohexyl acrylate-glycidyl acrylate-nonyl acrylate copolymer  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
 (photog. film containing lubricant and composite latex containing hydrophobic polymer and inorg. particle)

L15 ANSWER 18 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:715683 CAPLUS

DOCUMENT NUMBER: 128:41557

TITLE: **Silver halide photographic**  
 material containing a hydrazine and a development inhibitor releaser and its processing

INVENTOR(S): Ito, Hirohide

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 49 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09281645	A2	19971031	JP 1996-98162	19960419
PRIORITY APPLN. INFO.:			JP 1996-98162	19960419

OTHER SOURCE(S): MARPAT 128:41557

AB Claimed **photog.** material has (1) a **Ag** halide emulsion layer containing  $\geq 1$  nucleator selected from hydrazines and N-containing heterocyclic compound having reducing potential of  $\leq -0.60$  v, (2) a hydrophilic colloid layer containing a development inhibitor-releasing compound and (3) an interlayer containing water-soluble polymer. Also claimed is the method for developing the material using a **developer solution** with the pH of  $\leq 10.5$ . It provides an image with high contrast and reproduction quality on fine lines, and is suitable for **photomech.** applications. It also has good image stability. Preferable DIR compound is 1-phenyl-4-(DI moiety)-5-pyrazolone having time-controlling function in the DI moiety. Thus, a black-and-white **photog.** material having a **Ag**(Br30Cl70) emulsion layer containing 1-(2,2,6,6-tetramethylpiperazin-4-yl-amino-oxalyl)-2-[4-[3-[phenyl(4-chlorophenyl)phenylmethylthioacetoamido]phenylsulfoamino]phenyl]hydrazine, an interlayer containing a dextrin and a polymer latex, and a hydrophilic colloid layer containing 1-phenyl-3-[1-(2,5-di-tert-amylphenoxy)-1-(isopropyl)acetamino]-4-(1-phenyltetrazol-yl-5-thioethylphenoxy-carbonylamino)-5-pyrazolone was suitable for

photomech. use.

IT 154217-46-6, Styrene-methyl methacrylate- ethyl acrylate-sodium  
2-acrylamido-2-methyl-1-propanesulfonate copolymer  
RL: DEV (Device component use); USES (Uses)  
(interlayer; photog. material containing hydrazine and  
development inhibitor releaser to enhance image contrast, and its  
processing)

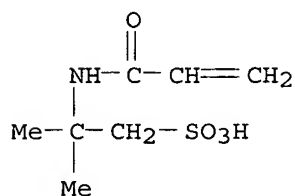
RN 154217-46-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzene,  
ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-  
propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

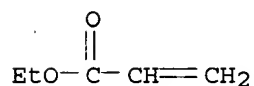


● Na

CM 2

CRN 140-88-5

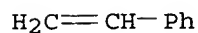
CMF C5 H8 O2



CM 3

CRN 100-42-5

CMF C8 H8

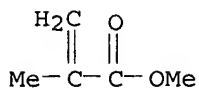


KOROMA EIC1700

CM 4

CRN 80-62-6

CMF C5 H8 O2



- IC ICM G03C001-76  
ICS G03C001-04; G03C001-06; G03C001-295; G03C001-43; G03C005-29
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST **photomech silver halide photog**  
material; hydrazine deriv additive **photog** material; development inhibitor releasing redox **photog**; pyrazolone development inhibitor releaser **photog**; tetrazolylthiopyrazolone development inhibitor **photog** material; dextrin additive interlayer **photog** material
- IT **Photographic development**  
(developing **photog**. material containing hydrazine and development inhibitor releaser with low pH **solution**)
- IT Lithographic films (**photographic**)  
(**photog**. material containing hydrazine and development inhibitor releaser to enhance image contrast, and its processing)
- IT 141187-74-8 141704-03-2 189456-28-8 190077-86-2 190077-87-3  
RL: DEV (Device component use); USES (Uses)  
(development inhibitor releaser; **photog**. material containing hydrazine to enhance image contrast, and its processing)
- IT 9003-05-8, Polyacrylamide 9004-53-9, Dextrin 9004-54-0, Dextran, uses 25586-20-3, Butyl acrylate-styrene-acrylic acid copolymer 154217-46-6, Styrene-methyl methacrylate- ethyl acrylate-sodium 2-acrylamido-2-methyl-1-propanesulfonate copolymer 161717-07-3, Cyclohexyl methacrylate-isononyl acrylate-glycidyl methacrylate copolymer  
RL: DEV (Device component use); USES (Uses)  
(interlayer; **photog**. material containing hydrazine and development inhibitor releaser to enhance image contrast, and its processing)
- IT 180678-11-9 186522-16-7 199658-42-9  
RL: DEV (Device component use); USES (Uses)  
(nucleating agent; **photog**. material containing hydrazine and development inhibitor releaser to enhance image contrast, and its processing)

L15 ANSWER 19 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:372622 CAPLUS

DOCUMENT NUMBER: 127:72953

TITLE: Imaging element capable of providing in single layer image and independent magnetic record



INVENTOR(S): Nair, Mridula; Oltean, George L.  
 PATENT ASSIGNEE(S): Eastman Kodak Company, USA  
 SOURCE: U.S., 15 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5633127	A	19970527	US 1996-626228	19960329
GB 2311619	A1	19971001	GB 1997-6098	19970324
GB 2311619	B2	19991124		
JP 10020429	A2	19980123	JP 1997-81067	19970331

PRIORITY APPLN. INFO.: US 1996-626228 19960329

AB An imaging element is disclosed comprised of a support and, coated on the support, at least one radiation-sensitive emulsion layer containing radiation-sensitive **silver halide** grains and an **aqueous processing solution**-permeable vehicle, wherein the radiation-sensitive emulsion layer addnl. contains from 0.1 to 10 mg/dm<sup>2</sup> of magnetic particles having a major axis less than 1  $\mu$ m and, based on the weight of the magnetic particles, from 10 to 200% of an amphipathic dispersant for the magnetic particles having a hydrophilic/lipophilic balance number of at least 8.

IT 9080-79-9, Poly(styrenesulfonic acid) sodium salt  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photog. and radiog. films with magnetic recording layers containing)

RN 9080-79-9 CAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 50851-57-5

CMF (C8 H8 O3 S)x

CCI PMS

CM 2

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS



D1- CH=CH<sub>2</sub>

D1- SO<sub>3</sub>H

IC ICM G03C001-76  
NCL 430496000  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST **photog** film magnetic record; radiog film magnetic record  
IT **Photographic** films  
Radiographic films  
(capable of providing in single layer images and independent magnetic records)  
IT Carnauba wax  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** and radiog. films with magnetic recording layers containing)  
IT 1344-28-1,  $\alpha$ -Alumina, uses 9080-79-9, Poly(styrenesulfonic acid) sodium salt 51569-39-2, Olin 10G 119574-62-8, Syn Fac 8337  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** and radiog. films with magnetic recording layers containing)  
IT 1309-37-1, Iron oxide (Fe<sub>2</sub>O<sub>3</sub>), uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** and radiog. films with magnetic recording layers containing cobalt-doped particles of)  
IT 7440-48-4, Cobalt, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** and radiog. films with magnetic recording layers containing iron oxide particles doped with)

L15 ANSWER 20 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1997:356136 CAPLUS  
DOCUMENT NUMBER: 127:25847  
TITLE: Method for processing **silver halide**  
**photographic** material containing a polyamide  
with a reductone-containing developer to improve  
neutral black tone  
INVENTOR(S): Yamashita, Yuji; Takahashi, Nariaki  
PATENT ASSIGNEE(S): Konica Co., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.  
CODEN: JKXXAF

KOROMA EIC1700

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09080706	A2	19970328	JP 1995-240030	19950919
PRIORITY APPLN. INFO.:			JP 1995-240030	19950919

AB Claimed method for processing **Ag** halide **photog.**  
 material is characterized by (1) that the **developer soln**  
 . is an alkaline **solution** containing a reductone and (2) that the emulsion  
 layer or other hydrophilic colloid layer contains a water-soluble synthetic  
 or natural polymer represented by the formula  $[\text{CH}_2\text{CR}_1\text{Ln}(\text{CONR}_2\text{R}_3)_m]$ , ( $\text{R}_1 =$   
 $\text{H}$ ,  $\text{C}_1\text{-6 alkyl}$ ;  $\text{R}_2, \text{R}_3 = \text{H}$ ,  $\text{C}_1\text{-10 alkyl}$ , aryl, aralkyl;  $\text{R}_2, \text{R}_3$  may be  
 combined to form a N-containing ring;  $\text{L} = \text{bivalent linkage}$ ;  $n = 0, 1$ ;  $m = 1,$   
 2). It has high drying speed and maintains neutral black tone and good  
 transparency even at rapid processing. It is insensitive to pressure  
 application, too. Thus, a black-and-white film containing dextrin in the  
 emulsion layer **processed** by a **developer soln**  
 . containing erythorbic **acid** provided the image with mentioned  
 advantages.

IT 189517-56-4

RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)

(black-and-white **photog.** emulsion containing acrylamide-type  
 polymer and/or water-soluble polymer using **developer**  
 containing reductone)

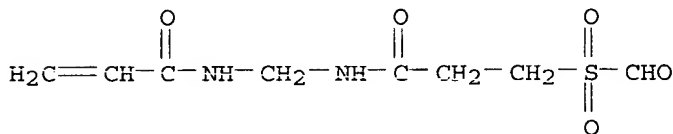
RN 189517-56-4 CAPLUS

CN 2-Propenamide, N-[[[3-(formylsulfonyl)-1-oxopropyl]amino]methyl]-, polymer  
 with 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 189517-55-3

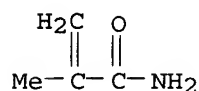
CMF C8 H12 N2 O5 S



CM 2

CRN 79-39-0

CMF C4 H7 N O



IC ICM G03C005-30  
ICS G03C001-035; G03C001-04; G03C001-32; G03C001-95; G03C005-38;  
G03C005-395

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

ST **silver halide photog** material print; black  
and white **photog** material; ascorbic acid developing  
agent **photog**; erythorbic acid developing agent  
**photog**; dextrin additive binder **photog** material;  
acrylamide copolymer additive **photog** material; styryl amide  
polymer **photog** material

IT **Photographic emulsions**  
(black-and-white **photog.** emulsion containing acrylamide-type  
polymer and/or water-soluble polymer using **developer**  
containing reductone)

IT 89-65-6, Erythorbic acid 9003-05-8, Polyacrylamide  
9004-53-9, Dextrin 189517-56-4  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
use); USES (Uses)  
(black-and-white **photog.** emulsion containing acrylamide-type  
polymer and/or water-soluble polymer using **developer**  
containing reductone)

IT 107-95-9, 3-Aminopropionic acid 503-66-2, 3-Hydroxypropionic  
acid 187032-81-1  
RL: MOA (Modifier or additive use); USES (Uses)  
(black-and-white **photog.** emulsion using developer containing  
reductone and fixing agent containing)

L15 ANSWER 21 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:715581 CAPLUS

DOCUMENT NUMBER: 126:39764

TITLE: **Processing solution for**  
**silver salt diffusion transfer lithographic**  
**plate**

INVENTOR(S): Kaneko, Akira; Saikawa, Masahiko

PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08262723	A2	19961011	JP 1995-69966	19950328
JP 3372391	B2	20030204		

PRIORITY APPLN. INFO.: JP 1995-69966 19950328

AB The **solution**, used for **processing** a lithog plate comprising a coarsened and anodized Al plate coated with a phys. development nucleus layer and with a **photosensitive Ag** halide emulsion layer, contains poly(styrene sulfonate) with average mo. weight  $\leq 20,000$ . The **processing solution** shows good storage stability and gives lithog. plate with good ink receptivity.

IT 50851-57-5D, Poly(styrene sulfonic acid), salts  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (processing solution containing poly(styrene sulfonate) for silver salt diffusion transfer lithog. plate)

RN 50851-57-5 CAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS



D1-CH=CH<sub>2</sub>

D1-SO<sub>3</sub>H

IC ICM G03F007-07  
 ICS B41N003-08

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **processing soln** polystyrene sulfonate lithog;  
**silver** salt diffusion transfer lithog

IT Lithographic plates  
 (processing solution containing poly(styrene sulfonate) for silver salt diffusion transfer lithog. plate)

IT 50851-57-5D, Poly(styrene sulfonic acid), salts  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (processing solution containing poly(styrene sulfonate) for silver salt diffusion transfer lithog. plate)

L15 ANSWER 22 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:262317 CAPLUS

DOCUMENT NUMBER: 124:356226

TITLE: Photopolymerizable compositions and their cured products  
 INVENTOR(S): Yokoshima, Minoru; Ookubo, Tetsuo; Sasahara, Kazunori  
 PATENT ASSIGNEE(S): Nippon Kayaku Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08041145	A2	19960213	JP 1994-193779	19940727
PRIORITY APPLN. INFO.:			JP 1994-193779	19940727

AB The title compns. **developable** with alkaline **solns.**, giving cured products, useful for solder resists with adhesion and resistance to solder heat and electroless **Ag** plating, contain (A) unsatd. group-containing polycarboxylic **acid** resins prepared by introducing onium salt-containing groups to residual glycidyl groups of compds. obtained by addition reaction of unsatd. monocarboxylic **acids** to a part of glycidyl groups of multifunctional epoxy resins followed by treating polybasic **acid** anhydrides, (B) **photopolymn.** initiators, and (C) diluents.

IT **176776-39-9P**  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (photopolymerizable compns. containing unsatd. group-containing polycarboxylic **acid** resins, **photopolymn.** initiators, and diluents)

RN **176776-39-9** CAPLUS

CN Ethanol, 2,2'-thiobis-, compd. with EOCN 1020 hydrogen 4-cyclohexene-1,2-dicarboxylate 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 111-48-8  
 CMF C4 H10 O2 S

HO-CH<sub>2</sub>-CH<sub>2</sub>-S-CH<sub>2</sub>-CH<sub>2</sub>-OH

CM 2

CRN 176776-37-7  
 CMF C8 H10 O4 . x C3 H4 O2 . x Unspecified

CM 3

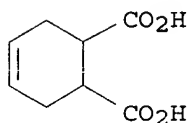
CRN 104841-49-8

CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

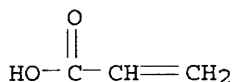
CM 4

CRN 88-98-2  
CMF C8 H10 O4



CM 5

CRN 79-10-7  
CMF C3 H4 O2



- IC ICM C08F290-06  
ICS C08G059-14; H05K003-18; H05K003-28
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST epoxy resin unsatd monocarboxylic acid addn; onium salt group introduction epoxy resin; polybasic acid anhydride onium epoxy resin; **photopolymerizable** epoxy resin printed circuit; solder resist **photopolymerizable** epoxy resin
- IT Epoxy resins, preparation  
Phosphonium compounds  
Quaternary ammonium compounds, preparation  
Sulfonium compounds  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**photopolymerizable** compns. containing unsatd. group-containing polycarboxylic acid resins, **photopolymn.** initiators, and diluents)
- IT 82799-44-8, 2,4-Diethylthioxanthone  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Kayacure DETX-S; **photopolymerizable** compns. containing unsatd. group-containing polycarboxylic acid resins, **photopolymn.** initiators, and diluents)
- IT 176776-36-6P, EOCN 104S acrylate 176776-39-9P 176776-41-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**photopolymerizable** compns. containing unsatd. group-containing polycarboxylic acid resins, **photopolymn.** initiators, and diluents)

IT 461-58-5, Dicyandiamide 28825-96-9, TEPIC 71868-10-5, Irgacure 907 77641-99-7, Kayarad DPHA 85305-70-0, EOCN 104S

RL: TEM (Technical or engineered material use); USES (Uses)

(**photopolymerizable** compns. containing unsatd. group-containing polycarboxylic acid resins, **photopolymn.** initiators, and diluents)

L15 ANSWER 23 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:248119 CAPLUS

DOCUMENT NUMBER: 124:356108

TITLE: **Silver halide photographic materials and processing thereof**

INVENTOR(S): Sakata, Hideaki; Atoyama, Hiroyuki; Muramatsu, Yasuhiko

PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

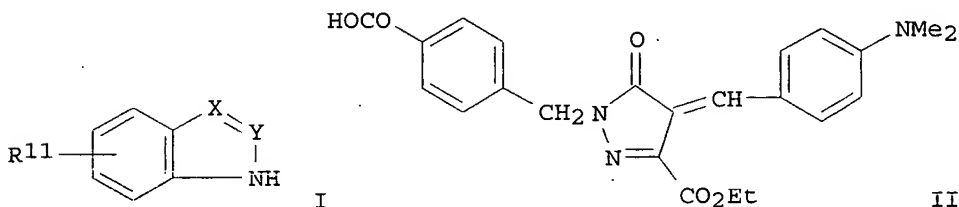
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08015800	A2	19960119	JP 1994-152255	19940704
PRIORITY APPLN. INFO.:			JP 1994-152255	19940704
OTHER SOURCE(S):		MARPAT 124:356108		

GI



AB The title materials contain a hydrazine derivative, a nucleation-promoting agent, a sulfonic acid group- or phosphoric acid group-containing water-soluble polymer, and hydrophilic colloid layers other than the Ag halide emulsion layers containing a fixed dye. The materials are processed at  $\geq 30^\circ$  with a **developing solution** containing a compound I (X, Y = N, :CR12,  $\geq 1$  of X and Y is



N; R11 = H, lower alkyl, halo, nitro; R12 = H, lower alkyl, halo, mercapto),  $\geq 0.5$  mL/L carbonate, and  $\leq 20$  g/L hydroquinone.

The materials useful for platemaking provide high-contrast, low-fog images without black spots even if they are continuously processed by automatic **developing** machines using **developing solns.** of

pH <11.0. Thus, a **photog.** film was prepared by using a **Ag** (Cl,Br) emulsion layer containing a hydrazine derivative, a

nucleation-promoting

agent, and Me acrylate-acrylamide-Na styrenesulfonate copolymer and a gelatin-based protective layer containing dye II which had been fixed.

IT 62744-35-8 64112-31-8 79042-20-9

134437-69-7 174459-44-0 174459-46-2

176673-46-4 176673-48-6

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(**photog.** film containing fixed dye and polymer with sulfonic acid or phosphoric acid group)

RN 62744-35-8 CAPLUS

CN Benzenesulfonic acid, ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9

CMF C8 H8 O3 S . Na

CCI IDS



D1-CH=CH<sub>2</sub>

D1-SO<sub>3</sub>H

● Na

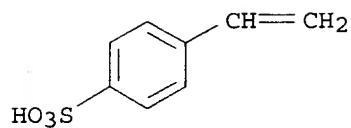
RN 64112-31-8 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with potassium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 4551-90-0

CMF C8 H8 O3 S . K

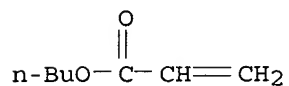


● K

CM 2

CRN 141-32-2

CMF C7 H12 O2



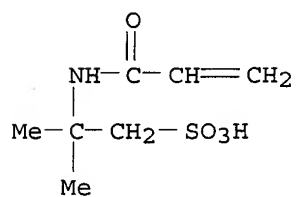
RN 79042-20-9 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

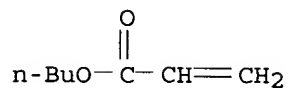
CMF C7 H13 N O4 S



CM 2

CRN 141-32-2

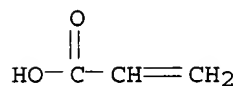
CMF C7 H12 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



RN 134437-69-7 CAPLUS

CN 2-Butenedioic acid, polymer with sodium 4-ethenylbenzenesulfonate (9CI)  
(CA INDEX NAME)

CM 1

CRN 6915-18-0

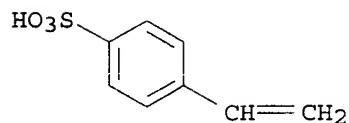
CMF C4 H4 O4



CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na



● Na

RN 174459-44-0 CAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 2-propenamide and sodium  
ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9

CMF C8 H8 O3 S . Na

CCI IDS



D1-CH=CH<sub>2</sub>

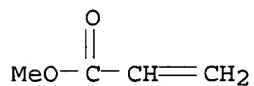
D1-SO<sub>3</sub>H

● Na

CM 2

CRN 96-33-3

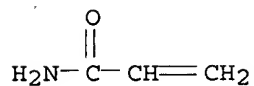
CMF C4 H6 O2



CM 3

CRN 79-06-1

CMF C3 H5 N O



RN 174459-46-2 CAPLUS

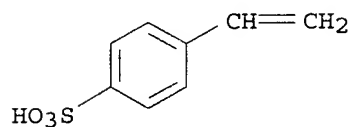
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and potassium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

KOROMA EIC1700

CRN 4551-90-0

CMF C8 H8 O3 S . K

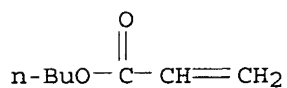


● K

CM 2

CRN 141-32-2

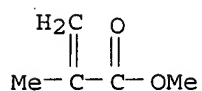
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



RN 176673-46-4 CAPLUS

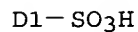
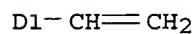
CN 2-Butenedioic acid, polymer with butyl 2-propenoate and sodium ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9

CMF C8 H8 O3 S . Na

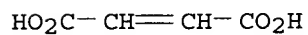
CCI IDS



CM 2

CRN 6915-18-0

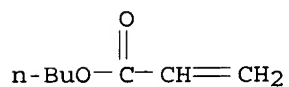
CMF C4 H4 O4



CM 3

CRN 141-32-2

CMF C7 H12 O2



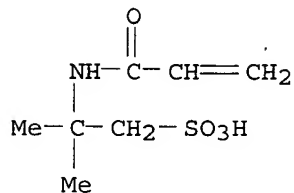
RN 176673-48-6 CAPLUS

CN 2-Butenedioic acid, polymer with butyl 2-propenoate and  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA  
INDEX NAME)

CM 1

CRN 15214-89-8

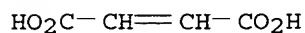
CMF C7 H13 N O4 S



CM 2

CRN 6915-18-0

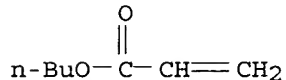
CMF C4 H4 O4



CM 3

CRN 141-32-2

CMF C7 H12 O2



IC ICM G03C001-06

ICS G03C001-035; G03C001-053; G03C001-295; G03C001-34; G03C001-43;  
G03C001-83; G03C005-29; G03C005-31

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

ST **silver halide photog** material dye; water sol  
polymer **photog** material; developer **photog** heterocyclic  
compd

IT **Photographic developers**  
(**photog.** developer containing heterocyclic compound and carbonate  
and hydroquinone)

IT **Photographic films**  
(**photog.** film containing fixed dye and polymer with sulfonic  
**acid** or phosphoric **acid** group)

IT 51-17-2, Benzimidazole 95-14-7, 1H-Benzotriazole 136-85-6,  
5-Methylbenzotriazole 584-08-7, Potassium carbonate 5401-94-5,  
5-Nitroindazole 7597-18-4, 6-Nitroindazole 72572-18-0

RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
use); USES (Uses)

(**photog.** developer containing heterocyclic compound and carbonate  
and hydroquinone)

KOROMA EIC1700

IT 123-31-9, Hydroquinone, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photog. developer containing heterocyclic compound and carbonate  
 and hydroquinone)

IT 176673-49-7 176673-50-0 176673-51-1 176673-52-2 176673-53-3  
 176673-54-4 176673-55-5  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES  
 (Uses)  
 (photog. development inhibitor-releasing agent)

IT 923-06-8 2425-28-7 2623-87-2, 4-Bromobutanoic acid  
 4263-52-9 4870-65-9 32014-22-5 176673-56-6  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES  
 (Uses)  
 (photog. emulsion containing bromide-releasing agent)

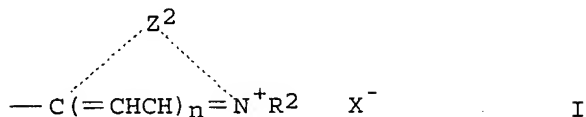
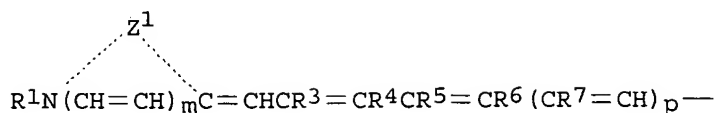
IT 124013-74-7 138652-16-1 159254-97-4 159805-02-4 160681-91-4  
 161239-90-3 162373-75-3 164982-03-0  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES  
 (Uses)  
 (photog. emulsion containing hydrazine compound and  
 nucleation-promoting agent)

IT 62744-35-8 64112-31-8 64137-49-1 79042-20-9  
 117573-89-4 117574-10-4 125603-57-8 134437-69-7  
 137566-14-4 162397-73-1 163768-61-4 163768-62-5 173320-39-3  
 174459-44-0 174459-46-2 176673-42-0 176673-43-1  
 176673-44-2 176673-45-3 176673-46-4 176673-47-5  
 176673-48-6 176772-74-0  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES  
 (Uses)  
 (photog. film containing fixed dye and polymer with sulfonic  
 acid or phosphoric acid group)

L15 ANSWER 24 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1994:545206 CAPLUS  
 DOCUMENT NUMBER: 121:145206  
 TITLE: Silver halide photographic  
 materials with high sensitivity in IR region  
 INVENTOR(S): Morihara, Hideaki; Yoshida, Kazuhiro; Arai, Takeo  
 PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06027567	A2	19940204	JP 1992-185267	19920713
PRIORITY APPLN. INFO.:			JP 1992-185267	19920713
GI				





AB The title materials comprise a support coated with  $\geq 1$  Ag halide emulsion layer containing  $\geq 1$  gelatin-stabilized polymer latex and spectrally sensitized with  $\geq 1$  dye I [R1, R2 = (substituted) alkyl, (substituted) aryl; R3-7 = H, alkyl, alkoxy, R3 and R5 or R4 and R6 may form a 5 or 6-membered ring; Z1, Z2 = nonmetallic atoms required to form a 5 or 6-membered N-containing heterocycle which may be substituted for halo or lower alkyl, alkoxy, alkoxycarbonyl, aryl, or OH groups; X- = anion; m, n, p = 0, 1]. The materials show high spectral sensitivity in IR region and prevent residual color staining after development, and the coating solution for the emulsion layer exhibits good storage stability.

IT 157080-34-7P

RL: PREP (Preparation)

(preparation of, gelatin-stabilized, photog. material containing)

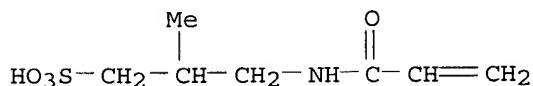
RN 157080-34-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and 2-methyl-3-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 144097-17-6

CMF C7 H13 N O4 S . Na

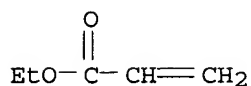


⊖ Na

CM 2

CRN 140-88-5

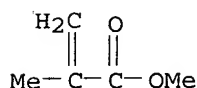
CMF C5 H8 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM G03C001-04

ICS C09B023-00; G03C001-20

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST gelatin polymer latex **photog** material; sensitizing dye **photog** material; IR sensitive **photog** material

IT **Photographic sensitizers**

(spectral, cyanine dyes, for IR sensitivity)

IT 51532-40-2 83846-69-9 94926-61-1 95235-08-8 95235-09-9  
95889-43-3 96127-79-6 106986-41-8 116410-34-5 130754-56-2  
130968-94-4 132796-83-9 136082-57-0 137590-41-1 137590-42-2  
142031-05-8 148643-19-0 157108-38-8 157108-39-9 157108-40-2  
157312-81-7

RL: TEM (Technical or engineered material use); USES (Uses)

(**photog.** spectral sensitizer, for IR sensitivity)

IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer  
157080-34-7P

RL: PREP (Preparation)

(preparation of, gelatin-stabilized, **photog.** material containing)

L15 ANSWER 25 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:521624 CAPLUS

DOCUMENT NUMBER: 121:121624

TITLE: **Silver halide photographic**

materials with high sensitivity in red light regions

INVENTOR(S): Morihara, Hideaki; Yoshida, Kazuhiro; Arai, Takeo

PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

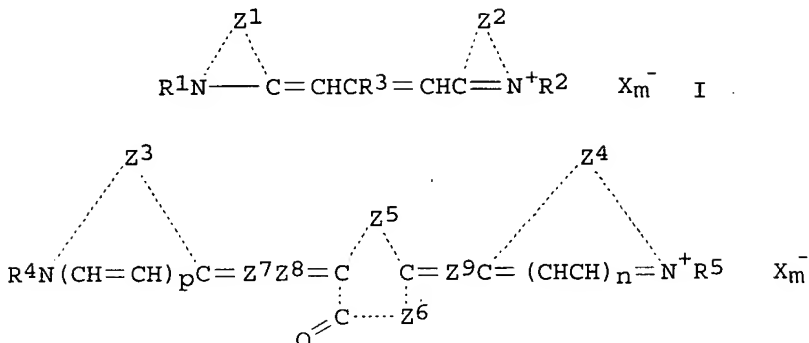
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KOROMA EIC1700

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 06027568	A2	19940204	JP 1992-185268	19920713
PRIORITY APPLN. INFO.:			JP 1992-185268	19920713
GI				



AB The title materials comprise a support coated with  $\geq 1$  Ag halide emulsion layer containing  $\geq 1$  gelatin-stabilized polymer latex and spectrally sensitized with  $\geq 1$  dye selected from I [R1, R2 = alkyl, carboxyalkyl, sulfoalkyl; R3 = alkyl; Z1, Z2 = nonmetallic atoms required to form benzothiazole, benzoselenazole, naphthothiazole, or naphthoselenazole ring (the heterocycles may be substituted for halo or lower alkyl, alkoxy, alkoxy carbonyl, aryl, or OH groups); X- = anion; m = 0, 1, m = 0 when I forms an inner salt] and II [R4, R5 = alkyl, alkenyl, hydroxyalkyl, carboxyalkyl, sulfalkyl; Z3, Z4 = atoms required to form a 5 or 6-membered N-containing heterocycle conventionally used in cyanine dyes; Z5, Z6 = nonmetallic atoms required to form 4-thiazolidinone or 4-imidazolidinone ring; Z7-9 = methine group, Z7 and R4 or Z9 and R5 may link each other via methine chain; n, p = 0, 1]. The materials show high spectral sensitivity toward red light and prevent residual color staining after **development**, and the coating **solution** for the emulsion layer exhibits good storage stability.

IT 156696-56-9P

RL: PREP (Preparation)

(preparation of, gelatin-stabilized, photog. material containing)

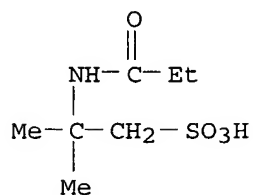
RN 156696-56-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate  
and 2-methyl-2-[(1-oxopropyl)amino]-1-propanesulfonic acid monosodium salt  
(9CI) (CA INDEX NAME)

CM 1

CRN 67416-74-4

CMF C7 H15 N O4 S . Na

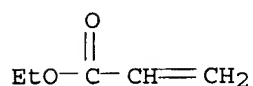


● Na

CM 2

CRN 140-88-5

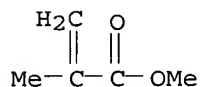
CMF C5 H8 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



IC ICM G03C001-04

ICS G03C001-047; G03C001-18

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST gelatin polymer latex **photog** material; sensitizing dye  
**photog** material; sensitivity red light **photog** film

IT **Photographic sensitizers**

(spectral, cyanine dyes, for red light sensitivity)

IT	18420-53-6	18426-56-7	34021-05-1	38395-13-0	38395-14-1
	38395-15-2	38395-19-6	38395-30-1	38395-31-2	38395-32-3
	38395-37-8	38408-71-8	38408-72-9	38756-69-3	47819-27-2
	57206-44-7	64569-97-7	65860-85-7	81380-17-8	133088-89-8
	145707-63-7	156696-26-3	156696-27-4	156696-28-5	156696-29-6
	156696-31-0	156696-33-2	156696-35-4	156696-37-6	156696-38-7
	156696-43-4	156696-44-5	156696-45-6	156696-47-8	156696-48-9

KOROMA EIC1700

156696-49-0 156696-52-5 156696-55-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** spectral sensitizer, for red light sensitivity)

IT 25586-20-3P, Acrylic acid-butyl acrylate-styrene copolymer  
156696-56-9P

RL: PREP (Preparation)  
(preparation of, gelatin-stabilized, **photog.** material containing)

L15 ANSWER 26 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:204512 CAPLUS

DOCUMENT NUMBER: 120:204512

TITLE: Rapid processing of **silver halide**  
black-and-white **photographic** material using  
fixer containing nonionic surfactant to prevent  
**silver** stain

INVENTOR(S): Ito, Katsuhiko; Sanpei, Takeshi; Kato, Mariko;  
Aritomi, Juji

PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05273711	A2	19931022	JP 1992-67300	19920325
PRIORITY APPLN. INFO.:			JP 1992-67300	19920325

AB The claimed method for processing **photog.** materials having an  
elec. conductive layer on the back side of the support involves imagewise  
exposure, development and fixing, where the **developing**  
**solution** and/or fixing **solution** contains a nonionic  
surfactant. It does not generate **Ag** stains on rollers in  
processor or on the material with the anti-static backing.

IT 153921-97-2

RL: USES (Uses)  
(**photog.** material antistatic layer containing)

RN 153921-97-2 CAPLUS

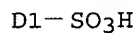
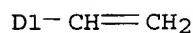
CN 2-Butenedioic acid, polymer with sodium ethenylbenzenesulfonate (9CI) (CA  
INDEX NAME)

CM 1

CRN 27457-28-9

CMF C8 H8 O3 S . Na

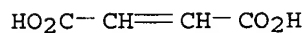
CCI IDS



CM 2

CRN 6915-18-0

CMF C4 H4 O4



IC ICM G03C005-38  
ICS G03C001-85  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)  
ST antistatic conductive backing **photog** material; nonionic  
surfactant fixer **photog** processing  
IT **Photographic** films  
(antistatic, with elec. conductive layer)  
IT **Photographic** developers  
(containing nonionic surfactant, for automatic processor)  
IT Saponins  
RL: USES (Uses)  
(**photog. processing solution** containing, for  
automatic processor)  
IT Surfactants  
(nonionic, **photog. processing solution**  
containing, for automatic processor)  
IT 153921-97-2  
RL: USES (Uses)  
(**photog. material** antistatic layer containing)  
IT 60-33-3, Linoleic acid, uses 111-46-6, uses  
RL: USES (Uses)  
(**photog. processing solution** containing, for  
automatic processor)

KOROMA EIC1700

L15 ANSWER 27 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:661495 CAPLUS

DOCUMENT NUMBER: 117:261495

TITLE: Method for processing **silver halide photographic material**

INVENTOR(S): Fujimoto, Hiroshi; Ishikawa, Takatoshi; Yoshida, Kazuaki; Yamanouchi, Junichi; Yasuda, Tomokazu

PATENT ASSIGNEE(S): Fuji Shashin Film K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

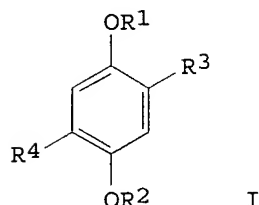
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04067037	A2	19920303	JP 1990-178449	19900705
PRIORITY APPLN. INFO.: GI			JP 1990-178449	19900705



AB A **Ag** halide color **photog.** material containing at least one hydroquinone derivative (I; R1, R2 = C1-18 alkyl or alkenyl; R3, R4 = C1-18 alkyl) is processed, after imagewise exposure, by a color **developing solution** containing an aromatic primary amine developing agent and at least one H2O-soluble polymer containing repeating units

having  $\geq 1$  anionic group(s). An overflow **solution** from a desilvering step is recycled. The method provides excellent processing stability of **photog.** properties, storage stability of magenta color images, and reduced yellow stain in continuous processing.

IT 25704-18-1 35641-59-9 144671-81-8  
144671-82-9

RL: USES (Uses)

(color developer containing, for continuous color **photog.** processing)

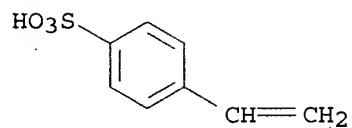
RN 25704-18-1 CAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6

CMF C8 H8 O3 S . Na



● Na

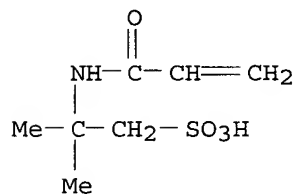
RN 35641-59-9 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

RN 144671-81-8 CAPLUS

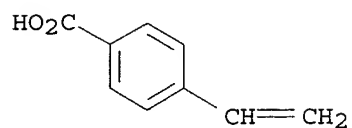
CN Benzoic acid, 4-ethenyl-, sodium salt, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 77124-40-4

CMF C9 H8 O2 . Na



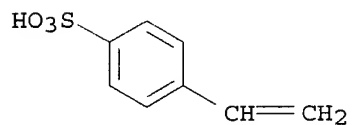


● Na

CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na



● Na

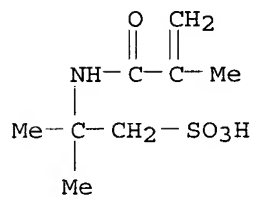
RN 144671-82-9 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 52825-47-5

CMF C8 H15 N O4 S . Na

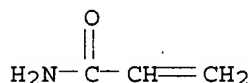


● Na

CM 2

KOROMA EIC1700

CRN 79-06-1  
CMF C3 H5 N O



IC ICM G03C007-407  
ICS G03C007-392; G03C007-44  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST color **photog** processing; hydroquinone color **photog** paper; water **soluble** polymer color **developer**  
IT **Photographic** processing  
(of color **photog.** material containing hydroquinone derivs.)  
IT **Photographic** paper  
(color, containing hydroquinone derivs. as discoloration inhibitors)  
IT **Photographic developers**  
(color, containing water-**soluble** polymer)  
IT 9003-01-4, Polyacrylic acid 9011-16-9 25087-26-7, Polymethacrylic acid 25704-18-1 35641-59-9 84872-31-1 108115-40-8 144671-81-8 144671-82-9 144719-04-0  
RL: USES (Uses)  
(color developer containing, for continuous color **photog.** processing)  
IT 70544-46-6 76460-83-8 125904-18-9 127486-72-0 127486-73-1 143991-68-8 143991-69-9 143991-70-2 143991-71-3 143991-72-4 143991-73-5  
RL: USES (Uses)  
(discoloration inhibitor, color **photog.** material containing)

L15 ANSWER 28 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1992:581638 CAPLUS  
DOCUMENT NUMBER: 117:181638  
TITLE: Method for processing **silver halide** color **photographic** material  
INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Ueda, Yutaka; Kawamura, Tomoki; Kida, Shuji  
PATENT ASSIGNEE(S): Konica Co., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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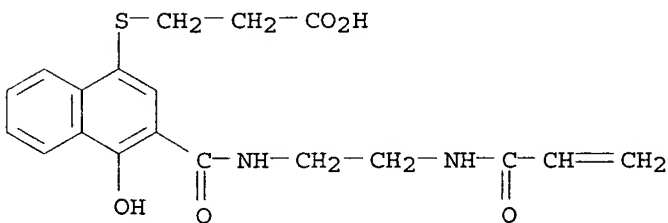
JP 04022947      A2    19920127      JP 1990-126557    19900518  
 PRIORITY APPLN. INFO.:      JP 1990-126557    19900518  
 AB    The title method involving color-development and bleaching-fixing process immediately after the development is characterized by uses of  $\geq 1$  timing moiety-containing compound or  $\geq 1$  specified compound, and a bleaching-fixing solution containing  $\geq 1$  organic acid Fe(III) complex salt as bleaching agent and at least thiosulfate  $\geq 1$  mol/L and thiocyanate  $\geq 0.5$  mol/L as fixing agents. This method is suitable for rapid processing, and gives good bleaching properties.

IT    124350-23-8 139700-68-8  
 RL: USES (Uses)  
       (silver halide color photog. material  
       containing, method for processing)

RN    124350-23-8 CAPLUS  
 CN    2-Propenoic acid, butyl ester, polymer with 3-[[4-hydroxy-3-[[[2-[(1-oxo-2-propenyl)amino]ethyl]amino]carbonyl]-1-naphthalenyl]thio]propanoic acid (9CI) (CA INDEX NAME)

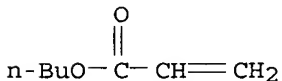
CM    1

CRN   122017-02-1  
 CMF   C19 H20 N2 O5 S



CM    2

CRN   141-32-2  
 CMF   C7 H12 O2

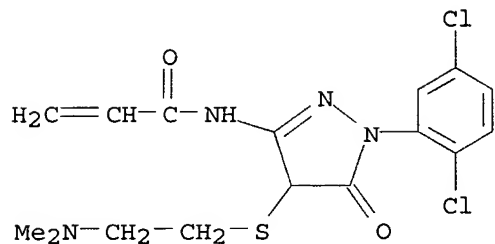


RN    139700-68-8 CAPLUS  
 CN    2-Propenoic acid, butyl ester, polymer with N-[1-(2,5-dichlorophenyl)-4-[[2-(dimethylamino)ethyl]thio]-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-propenamide (9CI) (CA INDEX NAME)

CM    1

CRN 139700-67-7

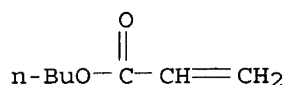
CMF C16 H18 Cl2 N4 O2 S



CM 2

CRN 141-32-2

CMF C7 H12 O2



IC ICM G03C007-42

ICS G03C007-305; G03C007-32

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver halide color photog processing;  
bleaching fixing photog processing

IT Photographic processing  
(rapid, bleaching-fixing solution for)

IT 29628-68-0 53321-94-1 73651-87-3 91154-97-1

RL: USES (Uses)

(bleaching agent, solution containing, processing of  
silver halide color photog. material by)

IT 1762-95-4 7783-18-8

RL: USES (Uses)

(fixing agent, solution containing, processing of  
silver halide color photog. material by)

IT 82620-19-7 115721-07-8 115721-09-0 115721-11-4 115721-12-5

116646-25-4 124350-23-8 124679-05-6 126198-47-8

126353-38-6 139695-61-7 139695-75-3 139695-76-4 139700-68-8

142339-98-8 143720-28-9 143720-29-0 143720-30-3 143720-31-4

143897-16-9

RL: USES (Uses)

(silver halide color photog. material  
containing, method for processing)

L15 ANSWER 29 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1992:540481 CAPLUS  
 DOCUMENT NUMBER: 117:140481  
 TITLE: Method for processing of **silver halide** color **photographic** material  
 INVENTOR(S): Fujimoto, Hiroshi; Yoshida, Kazuaki; Ishikawa, Takatoshi; Yamanouchi, Junichi; Yasuda, Tomokazu  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04009945	A2	19920114	JP 1990-113637	19900427
PRIORITY APPLN. INFO.:			JP 1990-113637	19900427

AB Color development of an imagewise-exposed **silver halide** color **photog.** material involves color development with a color **developer** containing a H<sub>2</sub>O-**soluble** polymer immediately followed by desilverization **process** with a desilverization **soln** . containing CO<sub>3</sub><sup>2-</sup> ion concentration 2.5 + 10<sup>-2</sup> to 1.3 + 10<sup>-1</sup> mol/L carried over from the color developer. ≥5.0 Weight% of a total gelatin coating in the color **photog.** material consists of **acid**-treated gelatin. The **photog.** processing can provide finished color images with glossy surface free from reticulation in rapid processing under low replenishing of the **processing solns.**

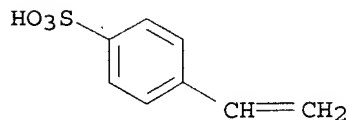
IT 25704-18-1 81998-89-2 143451-59-6  
 RL: USES (Uses)  
 (photog. color developer containing, for rapid processing)

RN 25704-18-1 CAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6  
 CMF C8 H8 O3 S . Na



Na

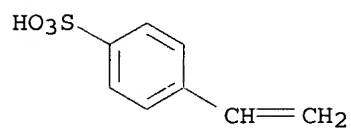
RN 81998-89-2 CAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, sodium salt, polymer with  
1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6

CMF C8 H8 O3 S . Na

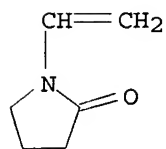


● Na

CM 2

CRN 88-12-0

CMF C6 H9 N O



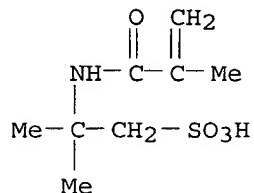
RN 143451-59-6 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(2-methyl-1-oxo-2-propenyl)amino]-,  
polymer with N-(2-hydroxyethyl)-2-methyl-2-propenamide (9CI) (CA INDEX  
NAME)

CM 1

CRN 21838-63-1

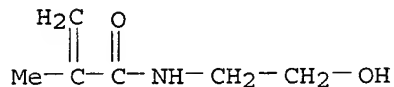
CMF C8 H15 N O4 S



CM 2

CRN 5238-56-2

CMF C6 H11 N O2



IC ICM G03C007-407

ICS G03C001-047; G03C007-42

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** material rapid processing; water **soluble** polymer color **developer**

IT **Photographic developers**

(color, containing water-**soluble** polymers, for prevention of reticulation)

IT 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Poly(acrylic acid)  
 9003-05-8, Polyacrylamide 9003-39-8 9004-32-4, Carboxymethylcellulose  
 25322-68-3, Poly(ethylene oxide) 25704-18-1 25751-21-7,  
 Acrylic acid-methacrylic acid copolymer  
 81998-89-2 114376-97-5 143451-59-6

RL: USES (Uses)

(**photog.** color developer containing, for rapid processing)

L15 ANSWER 30 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:479820 CAPLUS

DOCUMENT NUMBER: 117:79820

TITLE: Method for continuous processing **silver**  
**halide** color **photographic** material  
 by color developer containing hydroxylamine derivative

INVENTOR(S): Ueda, Shinji; Nakajo, Kiyoshi; Fujimoto, Hiroshi;  
 Kuraki, Yasuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

KOROMA EIC1700

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03211547	A2	19910917	JP 1990-7321	19900117
PRIORITY APPLN. INFO.:			JP 1990-7321	19900117

OTHER SOURCE(S): MARPAT 117:79820

AB A Ag halide color **photog.** material, containing at least each one kind of large rough particles (average particle size 2.0-7.0  $\mu\text{m}$ ) **soluble** in a **processing solution** and/or microparticles (average particle size 0.4-1.3  $\mu\text{m}$ ) insol. in the **processing solution** in at least one **nonphotosensitive** layer, is processed after exposure by a color developer containing an aromatic primary amine color developing agent and at least one HONR(LA) [L = (un)substituted alkylene; A = CO<sub>2</sub>H, SO<sub>3</sub>H, P(O)(OH)<sub>2</sub>, phosphinic **acid** residue, OH, (alkyl)amino, (alkyl)ammonium, (alkyl)carbamoyl, or (alkyl)sulfamoyl; R = H, (un)substituted alkyl].

IT 62136-18-9, Methyl methacrylate-styrenesulfonic **acid** copolymer

RL: USES (Uses)

(microparticles, **photog.** materials containing)

RN 62136-18-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethenylbenzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS

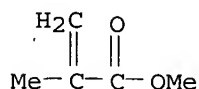
D1- CH=CH<sub>2</sub>D1- SO<sub>3</sub>H

CM 2

CRN 80-62-6

CMF C5 H8 O2





IC ICM G03C007-407  
ICS G03C001-06

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color **photog** material continuous processing; color developer hydroxylamine deriv preservative

IT **Photographic** processing.  
(color)

IT **Photographic** developers  
(color, containing hydroxylamine derivs. as preservatives)

IT 92-27-3, 2,3-Dihydroxynaphthalene-6-sulfonic **acid** 102-71-6, uses 149-46-2, 1,2-Dihydroxybenzene-3,5-disulfonic **acid** 156-87-6, 3-Amino-1-propanol 126920-75-0  
RL: USES (Uses)  
(color **photog.** developers containing)

IT 9003-32-1, Poly(ethyl acrylate) 9010-92-8, Methacrylic **acid** -styrene copolymer 9011-14-7, Poly(methyl methacrylate) 25014-41-9, Polyacrylonitrile 25086-15-1, Methyl methacrylate-methacrylic **acid** copolymer 25167-42-4, Glycidyl methacrylate-styrene copolymer 25767-39-9, Acrylic **acid**-methyl methacrylate-styrene copolymer 28133-04-2, Poly(phenyl acrylate) 62136-18-9, Methyl methacrylate-styrenesulfonic **acid** copolymer 106971-83-9  
RL: USES (Uses)  
(microparticles, **photog.** materials containing)

IT 13782-57-5 50825-12-2 89531-79-3 95073-63-5 115750-72-6  
134559-72-1 134559-73-2 134559-74-3 134559-76-5 137309-41-2  
137309-42-3 137659-64-4 139723-37-8 142681-04-7  
RL: USES (Uses)  
(preservative, for color **photog.** developers)

L15 ANSWER 31 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:256866 CAPLUS

DOCUMENT NUMBER: 114:256866

TITLE: Rapid development - processing of **silver halide photographic** materials

INVENTOR(S): Takamukai, Yasuhiko; Hanyu, Takeshi

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02211445	A2	19900822	JP 1989-34237	19890213

JP 2799582 B2 19980917

PRIORITY APPLN. INFO.:

JP 1989-34237

19890213

AB In the title development in which an elec. conductive layer containing a water-soluble polymer  $[-CH_2CR(L-D(SO_3M)_n)_x(A)y(B)z(C)w]$  (R = H, halo, alkyl; A, B, C = different monomer units of a polymer copolymd. from ethylenic unsatd. monomers containing CO<sub>2</sub>H, its ester, or halo; x = 10-100, y = 0-90, z = 0-20, and w = 0-10 mol%; D = connective group, divalent connective group comprising C, N, S, O, and P; L = phenylene, heterocyclylene; M = H, ammonium ion, alkali ion; n = 1, 2) is formed on the side of a support opposite to that having **photosensitive** emulsion layers and then an antihalation layer comprising substantially gelatin or its derivative is formed on the elec. conductive layer, by using an automated **developing-machine**, the fixing **solution** used in the automated **developing-machine** having the function of hardening the antihalation layer and/or elec. conductive layer.

IT 57833-28-0 134119-91-8

RL: USES (Uses)

(binders, **silver halide photog.** films  
with elec. conductive layers containing)

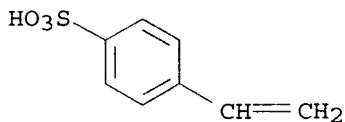
RN 57833-28-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6

CMF C8 H8 O3 S . Na

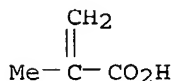


● Na

CM 2

CRN 79-41-4

CMF C4 H6 O2



RN 134119-91-8 CAPLUS

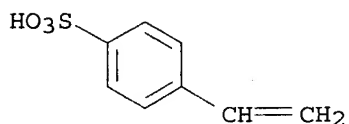
KOROMA EIC1700

CN 2-Propenoic acid, 2-hydroxyethyl ester, polymer with sodium  
4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 2695-37-6

CMF C8 H8 O3 S . Na

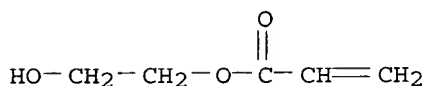


● Na

CM 2

CRN 818-61-1

CMF C5 H8 O3



IC ICM G03C005-38

ICS G03C001-825; G03C001-89

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and  
Other Reprographic Processes)

ST **photosensitive silver halide photog**

material; **silver photog** rapid development processing;  
antihalation layer **photog** hardening agent; elec conducting layer  
**photog** hardener

IT **Photographic** films

(elec. conductive layers and antihalation layers using)

IT **Photographic processing**

(rapid, fixing solns. for)

IT 57833-28-0 134119-91-8

RL: USES (Uses)

(binders, **silver halide photog.** films  
with elec. conductive layers containing)

IT 10043-01-3, Aluminum **sulfate**

RL: USES (Uses)

(**photog.** fixing solns. containing hardening agent of)

L15 ANSWER 32 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

KOROMA EIC1700

ACCESSION NUMBER: 1991:133008 CAPLUS  
DOCUMENT NUMBER: 114:133008  
TITLE: Rapid color **photographic** development using  
developer containing poly(styrenesulfonic acid  
) derivative  
INVENTOR(S): Kuze, Satoru; Koboshi, Shigeharu  
PATENT ASSIGNEE(S): Konica Co., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02188751	A2	19900724	JP 1989-9535	19890117
JP 2976110	B2	19991110		

PRIORITY APPLN. INFO.: JP 1989-9535 19890117

AB During the development of a **Ag** halide color **photog.**  
material using a **developing solution**, the  
**developing solution** contains at least 1  
poly(styrenesulfonic acid) derivative and the developing time is <35  
s.

IT 9080-79-9

RL: USES (Uses)  
(color **photog. developing solns.** containing)

RN 9080-79-9 CAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX  
NAME)

CM 1

CRN 50851-57-5  
CMF (C8 H8 O3 S)x  
CCI PMS

CM 2

CRN 26914-43-2  
CMF C8 H8 O3 S  
CCI IDS



D1-CH=CH<sub>2</sub>

D1-SO<sub>3</sub>H

IC ICM G03C007-407  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST color photog developer polystyrene sulfonate; silver color photog development rapid  
 IT Photographic developers (color, containing poly(styrenesulfonic acid) derivs.)  
 IT Photographic development (color, rapid)  
 IT 9080-79-9  
 RL: USES (Uses) (color photog. developing solns. containing)

L15 ANSWER 33 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1990:641378 CAPLUS  
 DOCUMENT NUMBER: 113:241378  
 TITLE: Processing of silver halide color photographic material  
 INVENTOR(S): Kuze, Satoru; Koboshi, Shigeharu  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02103538	A2	19900416	JP 1988-260334	19881013
PRIORITY APPLN. INFO.:			JP 1988-260334	19881013

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB In color developing a Ag halide color photog.

KOROMA EIC1700

material, the Ag halide color photog. material contains  $\geq 1$  compound selected from I [R, R1-5 = H, halo, OH, alkyl, alkoxy, SO<sub>3</sub>M, NHCH<sub>2</sub>SO<sub>3</sub>M; t = 1-3; M = cation], II [R1, R2 = H, alkyl, aryl, heterocyclyl; R3, R4 = OH, alkoxy, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sub>8</sub>, CONHR<sub>8</sub>, NHCOR<sub>8</sub>, amino, (R<sub>8</sub> = H, alkyl, aryl); L = methylene; n = 0, 1, 2; l, m = 0, 1], III [r = 1-3; W = O, S; L = methylene; R1-4 = H, alkyl, aryl, aralkyl, heterocyclyl,  $\geq 1$  is H], and IV (l = 1, 2; L = methylene; R1 = alkyl, aryl, heterocyclyl; R2 = OH, alkyl, alkoxy, CN, CF<sub>3</sub>, etc.; R3 = OZ1, NZ2Z3 (Z1, Z2, Z3 = H, alkyl); R4 = H, alkyl, Cl, alkoxy] and the color developer solution contains  $\geq 1$  styrenesulfonic acid derivative polymer. The background whiteness of the processed material is improved even by rapid processing.

IT 62744-35-8

RL: USES (Uses)

(color photog. developing solution containing)

RN 62744-35-8 CAPLUS

CN Benzenesulfonic acid, ethenyl-, sodium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 27457-28-9

CMF C8 H8 O3 S . Na

CCI IDS



D1-CH=CH<sub>2</sub>

D1-SO<sub>3</sub>H

● Na

IC ICM G03C007-407

ICS G03C007-26; G03C007-392

ICA G03C001-06; G03C001-12; G03C001-83

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color processing photog rapid; background whiteness color processing; styrenesulfonic acid polymer color processing

IT Photographic developers

(containing styrenesulfonic acid derivative polymers)

IT Photographic processing

KOROMA EIC1700

(color, rapid)  
 IT 62744-35-8  
 RL: USES (Uses)  
 (color photog. developing solution containing)  
 IT 6370-93-0 63059-36-9 79285-10-2 94421-79-1 127811-60-3  
 130878-08-9  
 RL: USES (Uses)  
 (color photog. material containing, for rapid processing)

L15 ANSWER 34 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1990:242936 CAPLUS  
 DOCUMENT NUMBER: 112:242936  
 TITLE: Processing of silver halide color  
 photographic material  
 INVENTOR(S): Ueda, Shinji; Morigaki, Masakazu; Koshimizu, Toshio  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01224762	A2	19890907	JP 1988-51237	19880304
JP 07066171	B4	19950719		

PRIORITY APPLN. INFO.: JP 1988-51237 19880304

AB A bleach-fixing solution containing an organic acid Fe(III) complex salt and sulfinic acid or its salt is used for processing of color photog. material. The sulfinic acid derivative is used as a preservative. The photog. material may contain  $\geq 1$  cyan dye-forming coupler (i.e. phenol type, naphthol type). Stability of bleach-fixing solution can be improved.

IT 120407-19-4  
 RL: USES (Uses)  
 (preservative, bleach-fixing solution containing)

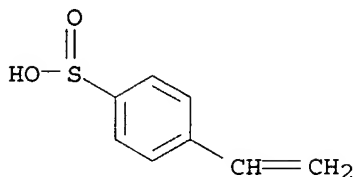
RN 120407-19-4 CAPLUS

CN Benzenesulfinic acid, 4-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 60081-74-5

CMF C8 H8 O2 S



IC ICM G03C007-42  
ICS G03C007-34

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST sulfinic acid preservative; sulfinate preservative bleaching fixing soln; iron complex salt bleach

IT Photographic processing  
(color, bleach-fixing solution containing iron(III) complex bleaching agent and sulfinate preservative for)

IT 21265-50-9 103690-85-3 104002-61-1 105011-26-5 105560-22-3  
RL: USES (Uses)  
(bleach-fixing solution containing, as bleaching agent)

IT 824-79-3 873-55-2 15898-38-1 16642-95-8 57267-75-1 93439-61-3  
120405-31-4 120407-19-4 127427-63-8 127427-64-9  
127427-65-0 127427-66-1  
RL: USES (Uses)  
(preservative, bleach-fixing solution containing)

L15 ANSWER 35 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:148956 CAPLUS

DOCUMENT NUMBER: 112:148956

TITLE: Silver halide color  
photographic material with stable color rendition and color images

INVENTOR(S): Furusawa, Genichi; Hirose, Takeshi; Hirano, Tsumoru

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 72 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01186932	A2	19890726	JP 1987-295734	19871124
PRIORITY APPLN. INFO.:			JP 1987-295734	19871124
AB The title photog. material possesses on a support a layer containing an emulsion based on a mixed solution containing $\geq 1$ diffusion-resistant oleophilic coupler and an organic solvent-miscible copolymer containing repeating units containing acidic groups $\leq 30$ mol%, the above layer showing a coupler concentration of 0.03-03 mmol/cm <sup>3</sup> in a swollen state in a color developer solution and a				



swelling degree of 100-300% in the color developer soln

IT 125870-92-0

RL: USES (Uses)

(color photog. material using)

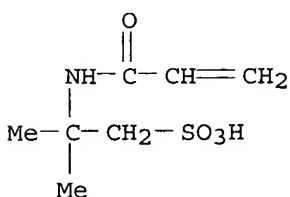
RN 125870-92-0 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with N-(1,1-dimethylethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

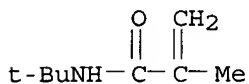
CMF C7 H13 N O4 S



CM 2

CRN 6554-73-0

CMF C8 H15 N O



IC ICM G03C001-06

ICS G03C007-32; G03C007-34

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog film coupler concn

IT Photographic couplers

IT Photographic films

(for high color rendition and stable image formation)

IT Photographic emulsions

(swelling of)

IT 25322-25-2 101550-37-2 125870-92-0

RL: USES (Uses)

(color photog. material using)

IT 2923-93-5 20364-09-4 31037-84-0 65749-35-1 92589-17-8 93951-12-3  
 96758-05-3 101664-25-9 107444-89-3 108673-51-4 117827-06-2  
 117844-18-5

RL: TEM (Technical or engineered material use); USES (Uses)

(cyan **photog.** coupler)  
 IT 61368-52-3 104660-32-4 104660-33-5  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (magenta **photog.** coupler)  
 IT 54942-74-4 55697-63-7 95050-16-1  
 RL: USES (Uses)  
 (yellow **photog.** coupler)

L15 ANSWER 36 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1990:148941 CAPLUS  
 DOCUMENT NUMBER: 112:148941  
 TITLE: Method for processing **silver halide**  
 color **photographic** material  
 INVENTOR(S): Sakanoue, Kei  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 100 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 330936	A2	19890906	EP 1989-102803	19890217
EP 330936	A3	19900530		
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 01213650	A2	19890828	JP 1988-37701	19880220
US 5114835	A	19920519	US 1989-313008	19890221
PRIORITY APPLN. INFO.:			JP 1988-37701	19880220

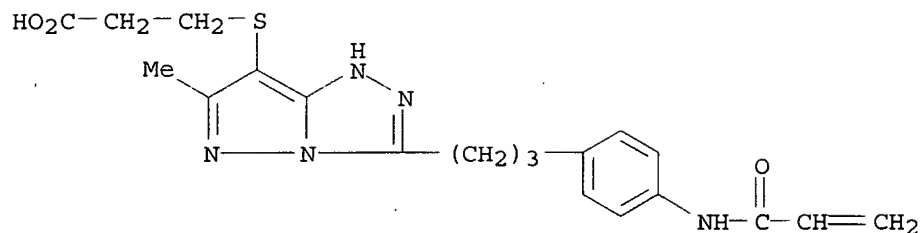
AB A method for processing an imagewise exposed **Ag** halide color **photog.** material containing  $\geq 1$  compound capable of reacting with an oxidation product of a developing agent to release a bleaching accelerator involves treating the material after **development** with a **processing solution** having bleaching ability and containing  $\geq 1$  ferric complex of a polycarboxylic amino **acid** selected from EDTA, dialkylenetriaminepentacetic **acid**, cyclohexanediaminetetraacetic **acid**, and 1,2-propylene-diaminetetraacetic **acid** and a ferric complex salt of 1,3-diaminopropanetetraacetic **acid** in a molar ratio of  $\leq 3$  as the bleaching agents.

IT 125976-27-4  
 RL: USES (Uses)  
 (**photog.** bleaching accelerator-releasing compound, color **photog.** material containing)

RN 125976-27-4 CAPLUS  
 CN 2-Propenoic acid, ethyl ester, polymer with 3-[[6-methyl-3-[3-[4-[(1-oxo-2-propenyl)amino]phenyl]propyl]-1H-pyrazolo[5,1-c]-1,2,4-triazol-7-yl]thio]propanoic acid (9CI) (CA INDEX NAME)

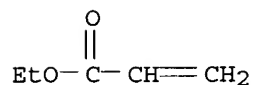
CM 1

CRN 122051-06-3  
CMF C20 H23 N5 O3 S



CM 2

CRN 140-88-5  
CMF C5 H8 O2



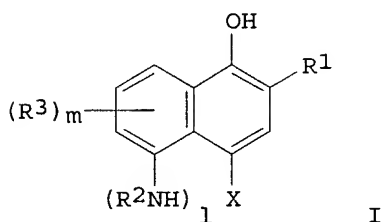
- IC ICM G03C007-32  
ICS G03C007-42
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST color **photog processing** bleaching soln;  
polycarboxylic amino acid ferric complex
- IT **Photographic processing**  
(color, bleaching solns. for, containing polycarboxylic amino acid and polycarboxylic amino acid ferric complex)
- IT Amino acids, compounds  
RL: USES (Uses)  
(polycarboxylic, iron complexes, **photog.** bleaching solns. containing, for color materials containing bleaching accelerator-releasing compound)
- IT 1939-36-2, 1,3-Diaminopropanetetraacetic acid 21265-50-9  
85959-68-8 103690-85-3 104002-61-1 111687-36-6  
RL: USES (Uses)  
(color **photog.** bleaching solns. containing, for use with color materials containing bleaching accelerator-releasing compound)
- IT 87947-03-3 105488-33-3 105504-92-5 121941-09-1 124898-01-7  
125976-27-4  
RL: USES (Uses)  
(**photog.** bleaching accelerator-releasing compound, color **photog.** material containing)

L15 ANSWER 37 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

KOROMA EIC1700

ACCESSION NUMBER: 1989:644121 CAPLUS  
 DOCUMENT NUMBER: 111:244121  
 TITLE: Processing of **silver halide** color  
**photographic** material with improved decoloring  
 and cyan stain  
 INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Kuze, Satoru  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 64000953	A2	19890105	JP 1987-156038	19870623
PRIORITY APPLN. INFO.: GI			JP 1987-156038	19870623



AB The processing of a color **photog.** material containing a coupler of the structure I [R1 = CONR4R5, NHCOR4, NHCO2R6, NHSO2R6, NHCONR4R5, NHSO2NR4R5; R2 = a monovalent group; R3 = a substituent; X = H, a group to be released upon reaction with an oxidized aromatic primary amine developer; l = 0, 1; m = 3; R4, R5 = H, aromatic group, aliphatic group, or heterocyclyl; R6 = an aromatic group, aliphatic group, or heterocyclyl] comprises (a) color **development**, (b) bleaching with a **solution** containing an Fe(III) complex salt of a compound of the formula (R11L1)(R12N2)NLN(L3R13)(L1R14) and/or R15L5N(L6R16)(L7R17) [L = alkylene, cycloalkylene, phenylene, L8OL8OL8, L9ZL9; Z = NL10R18, N(L12R19)L11N(12R19), NR20, N(R21)L13N(R21); L1-L13 = alkylene; R11-R21 = H, OH, carboxylic **acid** (or carboxylate), sulfonic **acid** (or sulfonate)], and (c) treatment with an alkali bath (pH ≥ 8.0).

IT 122779-74-2

RL: TEM (Technical or engineered material use); USES (Uses)  
 (**photog.** cyan coupler, processing of color material containing)

RN 122779-74-2 CAPLUS

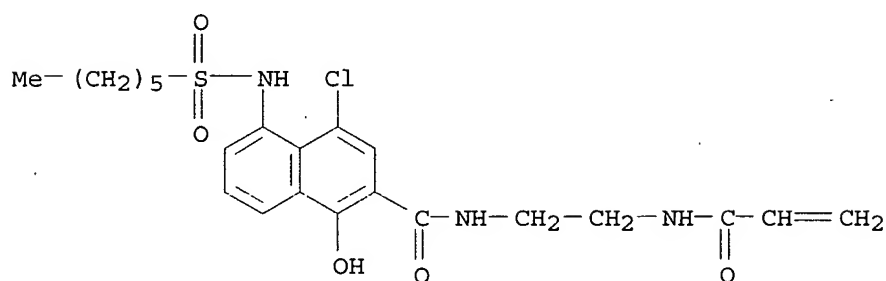
CN 2-Propenoic acid, polymer with 4-chloro-5-[(hexylsulfonyl)amino]-1-hydroxy-N-[2-[(1-oxo-2-propenyl)amino]ethyl]-2-naphthalenecarboxamide and methyl

2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 122779-73-1

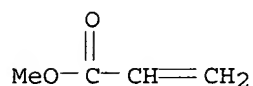
CMF C22 H28 Cl N3 O5 S



CM 2

CRN 96-33-3

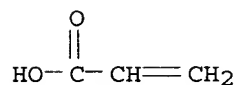
CMF C4 H6 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



IC ICM G03C007-30

ICS G03C007-26; G03C007-34

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST iron complex salt bleach photog; processing color photog material

IT Photographic processing

(color, bleach solution containing iron(III) complex salt for)

IT 16448-54-7 21265-50-9 51181-50-1 85959-68-8 103690-85-3

KOROMA EIC1700

104002-61-1 105057-82-7 105832-26-6 111687-36-6 119501-88-1  
122792-17-0

RL: USES (Uses)

(**photog.** bleach solution containing)

IT 39163-92-3 101820-05-7 101820-11-5 109625-49-2 109904-57-6  
109904-61-2 110928-56-8 111360-24-8 115625-84-8 115657-51-7  
115657-53-9 115825-96-2 122779-74-2

RL: TEM (Technical or engineered material use); USES (Uses)

(**photog.** cyan coupler, processing of color material containing)

L15 ANSWER 38 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:487286 CAPLUS

DOCUMENT NUMBER: 111:87286

TITLE: Processing of **silver halide** color  
**photographic** materials

INVENTOR(S): Ueda, Shinji; Sakagami, Megumi; Kobayashi, Hidetoshi;  
Ichijima, Yasushi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

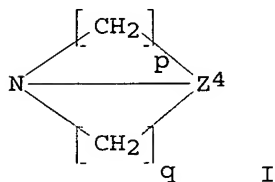
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63261362	A2	19881028	JP 1987-95433	19870420
JP 08033643	B4	19960329		
PRIORITY APPLN. INFO.:			JP 1987-95433	19870420

GI



AB In the claimed processing method, color **photog.**  
**photosensitive** materials containing a compound which releases a  
bleaching-promoting agent upon reaction with an oxidized developing agent  
is color-developed in a **developer solution**  
which does not contain sulfite ion-releasing compds. The  
**developer solution** preferably contains  $\geq 1$  compound  
selected from amines  $RNR_1ZCO_2H$  ( $R, R_1 = H, \text{alkyl}; Z = \text{alkylene}$ ),  $R_2NR_3R_4$   
( $R_2, R_3, R_4 = H, \text{alkyl, alkenyl, aryl, aralkyl, heterocyclyl}$ ; two of the  
 $R_2, R_3,$  and  $R_4$  may combine to form a heterocycle),  $R_5NR_6Z_1X_n(Z_2X_1)_mZ_3NR_7R_8$   
( $R_5-R_8 = H, \text{alkyl}; Z_1-Z_3 = \text{alkylene}; X, X_1 = NR_9, O, S, CO, SO_2, SO$ ;  $R_9 =$

H, alkyl; n, m = 0, 1, 2, 3), and I (Z4 = trivalent group needed to complete the condensed ring; p = 0-4; q = 1-5). The developer may also contain  $\geq 1$  compound selected from hydrazines, hydrazides, and hydroxylamines. The method improves bleaching without degrading other **photoq.** characteristics.

IT 121934-19-8

RL: TEM (Technical or engineered material use); USES (Uses)

(photog. coupler, bleach promotor-releasing)

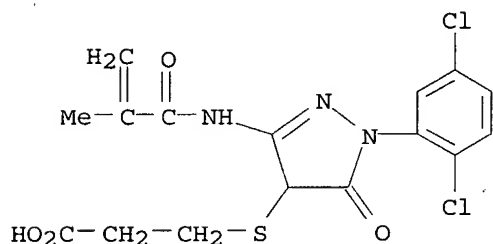
RN 121934-19-8 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 3-[[1-(2,5-dichlorophenyl)-4,5-dihydro-3-[(2-methyl-1-oxo-2-propenyl)amino]-5-oxo-1H-pyrazol-4-yl]thio]propanoic acid and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 121934-18-7

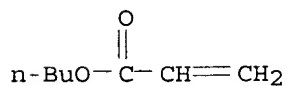
CMF C16 H15 C12 N3 O4 S



CM 2

CRN 141-32-2

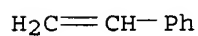
CMF C7 H12 O2



CM 3

CRN 100-42-5

CMF C8 H8



IC ICM G03C007-42

KOROMA EIC1700

ICS G03C007-26  
ICA G03C007-32  
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST color **photog** developer additive amine; bleaching promotion color **photog**  
IT **Photographic** couplers  
(bleach promotor-releasing)  
IT **Photographic** processing  
(color, bleach promotion in)  
IT **Photographic** developers  
(color, sulfite-free, additives for)  
IT 56-86-0, L-Glutamic acid, uses and miscellaneous 102-71-6,  
uses and miscellaneous 110-18-9, N,N,N',N'-Tetramethylethylenediamine  
111-40-0, Diethylenetriamine 140-82-9 280-57-9, 1,4-  
Diazabicyclo[2.2.2]octane 479-59-4 996-98-5 1118-68-9 1615-80-1,  
N,N'-Diethylhydrazine 1619-34-7, 1-Azabicyclo[2.2.2]octan-3-ol  
3018-41-5 3710-84-7, Diethylhydroxylamine 6415-12-9,  
Tetramethylhydrazine 6674-22-2 6917-37-9 7738-38-7 21520-79-6  
66003-61-0 105384-29-0 114478-07-8 120583-50-8 121933-74-2  
121933-75-3 121933-76-4  
RL: USES (Uses)  
(photog. color developer solution containing,  
sulfite-free)  
IT 105504-92-5 120069-45-6 121605-08-1 121605-10-5 121817-02-5  
121933-65-1 121933-66-2 121933-73-1 121934-19-8  
123472-13-9  
RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. coupler, bleach promotor-releasing)

L15 ANSWER 39 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1989:202729 CAPLUS  
DOCUMENT NUMBER: 110:202729  
TITLE: Method for processing **silver halide**  
color **photographic** light-sensitive materials  
with sulfinic acid-containing  
**solution** for stain-free images  
INVENTOR(S): Morigaki, Masakazu; Ishikawa, Takatoshi; Andoh,  
Kazuto; Seto, Nobuo; Ueda, Shinji; Koshimizu, Toshio  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 125 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 294769	A2	19881214	EP 1988-109074	19880607
EP 294769	A3	19891123		
EP 294769	B1	19940302		



R: DE, FR, GB

JP 01230039 A2 19890913 JP 1988-136724 19880603

JP 07119981 B4 19951220

US 5006456 A 19910409 US 1988-202558 19880606

PRIORITY APPLN. INFO.:

JP 1987-142941 19870608

JP 1987-280810 19871106

AB In a color **photog.** material processing method which comprises **development** with a **solution** containing an aromatic primary amine, desilvering, washing and/or stabilizing,  $\geq 1$  **processing solution** containing  $\geq 1$  compound selected from sulfinic **acids**, their salts, or their precursors is used. This method effectively prevents stain formation due to not only to the **photog.** emulsion but also the **processing solns.** Thus, a multilayer color **photog.** paper was processed with wash water containing Na benzenesulfinate. The processed paper was free of stain.

IT 120407-19-4

RL: USES (Uses)

(**photog. processing solution** containing, for stain prevention)

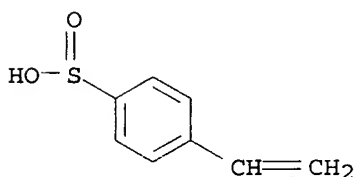
RN 120407-19-4 CAPLUS

CN Benzenesulfinic acid, 4-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 60081-74-5

CMF C8 H8 O2 S



IC ICM G03C007-30

ICS G03C007-42; G03C007-40

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST sulfinic **acid photog** processing stain

IT **Photographic processing**

(color, with **solution** containing sulfinic **acid**, for stain prevention)

IT 824-79-3 873-55-2, Benzenesulfinic **acid** sodium salt

15959-31-6 16642-95-8 93439-61-3 116008-37-8, Pyridine-4-sulfinic **acid** sodium salt 120405-27-8 120405-28-9 120405-29-0

120405-30-3 120405-31-4 120405-32-5 120405-33-6 120405-34-7

120407-19-4

RL: USES (Uses)

(**photog. processing solution** containing, for stain prevention)

L15 ANSWER 40 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1988:446009 CAPLUS

DOCUMENT NUMBER: 109:46009

TITLE: Color **photographic** image formation by rapid processing

INVENTOR(S): Hirai, Hiroyuki; Yabuki, Yoshiharu; Iwano, Haruhiko

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Ger. Offen., 77 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3705139	A1	19870820	DE 1987-3705139	19870218
DE 3705139	C2	19920227		
JP 63011940	A2	19880119	JP 1986-257463	19861029
JP 07046218	B4	19950517		
JP 63023149	A2	19880130	JP 1986-257464	19861029
GB 2186987	A1	19870826	GB 1987-3612	19870217
GB 2186987	B2	19900110		
US 4791048	A	19881213	US 1987-16591	19870219
PRIORITY APPLN. INFO.:			JP 1986-34895	19860219
			JP 1986-56477	19860314
			JP 1986-70055	19860328
			JP 1986-257463	19861029

AB A process for the formation of a color image with sufficient color d. within a short processing or development time while at the same time showing improved stability of the **developer solution** uses a **Ag halide photog.** material containing a **photosensitive Ag halide**, a 2-equiv coupler, a binder, and an essentially water-insol. basic metallic compound and a **processing or developer solution** containing a complexing agent that reacts with the metal of the water-insol. basic compound to form a complex and free the base. Thus, a paper support was coated with a yellow coupler-containing gelatin-**Ag**(Br,Cl) emulsion layer and a layer containing gelatin and basic Zn carbonate. The resultant material was then exposed, color **developed** in an **aqueous solution** containing tri-Na nitrilotriacetate, benzyl alc., diethylene glycol, Na<sub>2</sub>SO<sub>3</sub>, hydroxylamine hydrogen **sulfate**, K picolinate, and N-ethyl-N-( $\beta$ -methanesulfonamidoethyl)-3-methyl-4-aminoaniline hydrogen **sulfate**, bleach-fixed, and washed to show a Dmin (yellow) of 0.11 and a Dmax (yellow) of 1.9.

IT 115042-83-6

RL: USES (Uses)

(**photog.** two-equivalent magenta coupler, color materials containing, for rapid processing)

RN 115042-83-6 CAPLUS

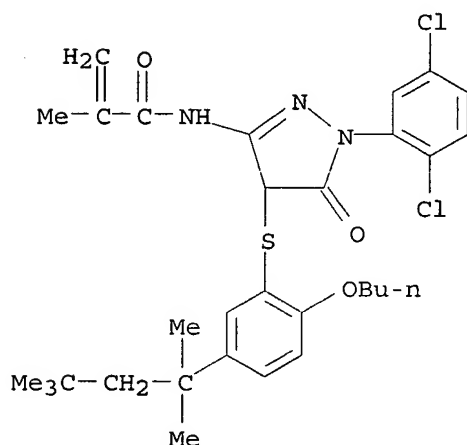
CN 2-Propenoic acid, butyl ester, polymer with N-[4-[[2-butoxy-5-(1,1,3,3-

tetramethylbutyl)phenyl]thio]-1-(2,5-dichlorophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 115042-82-5

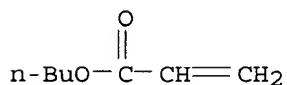
CMF C31 H39 Cl2 N3 O3 S



CM 2

CRN 141-32-2

CMF C7 H12 O2



IC ICM G03C007-30

ICS G03C007-26; G03C007-32

ICA G03C007-42; G03C007-34; G03C007-36; G03C007-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog paper rapid processing; film color photog rapid processing

IT Photographic paper

(color, containing water-insol. basic metallic compound for high image d.)

IT Photographic development

Photographic processing

(color, rapid, of water-insol. basic metallic compound-containing materials)

IT Photographic couplers

(two-equivalent)

IT 115301-95-6

KOROMA EIC1700

RL: USES (Uses)  
 (color materials containing, for rapid processing)

IT 583-52-8 25108-36-5, Potassium picolinate 56744-33-3 57665-05-1,  
 Sodium picolinate 115317-01-6

RL: USES (Uses)  
 (color **photog.** developer containing, for rapid processing of  
 water-insol. basic metallic compound-containing materials)

IT 471-34-1, Calcium carbonate, uses and miscellaneous 1314-13-2, Zinc  
 oxide, uses and miscellaneous 10476-83-2D, basic 20427-58-1, Zinc  
 hydroxide

RL: USES (Uses)  
 (color **photog.** paper containing, rapid development of, in  
 developer containing complexing agent)

IT 96758-05-3 115317-02-7

RL: USES (Uses)  
 (**photog.** two-equivalent cyan coupler, color materials containing  
 water-insol. basic metallic compound and, rapid processing of)

IT 31037-84-0 76379-54-9 103425-88-3 115301-93-4 115301-94-5  
 115317-04-9 115317-05-0

RL: USES (Uses)  
 (**photog.** two-equivalent cyan coupler, color materials containing, for  
 rapid processing)

IT 85888-24-0

RL: USES (Uses)  
 (**photog.** two-equivalent magenta coupler, color materials containing  
 water-insol. basic metallic compound and, rapid processing of)

IT 54919-30-1 76379-53-8 89035-11-0 92991-05-4 104166-82-7  
 115042-83-6

RL: USES (Uses)  
 (**photog.** two-equivalent magenta coupler, color materials containing,  
 for rapid processing)

IT 70950-45-7 72494-15-6 92683-20-0 93802-86-9 115317-03-8

RL: USES (Uses)  
 (**photog.** two-equivalent yellow coupler, color materials containing  
 water-insol. basic metallic compound and, rapid processing of)

L15 ANSWER 41 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:431117 CAPLUS

DOCUMENT NUMBER: 107:31117

TITLE: Color **photographic** processing method

INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Miyaoka,  
 Kazuyoshi; Kuze, Satoru

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 30 pp.  
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 61261741 A2 19861119 JP 1985-105390 19850515

JP 06058518 B4 19940803

PRIORITY APPLN. INFO.:

JP 1985-105390 19850515

AB A Ag halide color photog. photosensitive

material containing core-shell type emulsions with  $\geq 3$  mol % AgI and  $\geq 1$  polymeric coupler is color- developed by adding a replenishing solution containing  $\leq 3.0 + 10^{-3}$  mol bromide/L to the color developer solution at a rate of  $\leq 9$  mL/100 cm<sup>2</sup> of the photosensitive material processed. The color developer solution containing carboxylic acid, phosphoric acid, or OH-substituted arom or heterocyclic compound is preferably used for the above process. The method reduces development fluctuations and also reduces pollution.

IT 104603-61-4 108854-86-0

RL: TEM (Technical or engineered material use); USES (Uses)

(photog. coupler, development latitude in relation to)

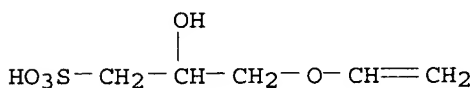
RN 104603-61-4 CAPLUS

CN 2-Naphthalenecarboxylic acid, 4-fluoro-1-hydroxy-, 2-(2-methyl-1-oxo-2-propenyl)hydrazide, polymer with 3-(ethenyloxy)-2-hydroxy-1-propanesulfonic acid monosodium salt and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 104603-60-3

CMF C5 H10 O5 S . Na

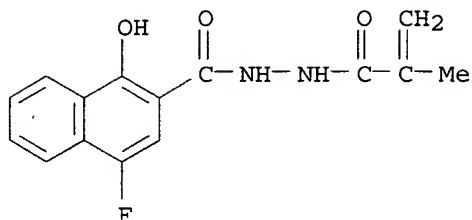


● Na

CM 2

CRN 104603-59-0

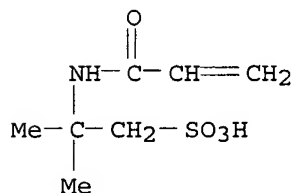
CMF C15 H13 F N2 O3



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

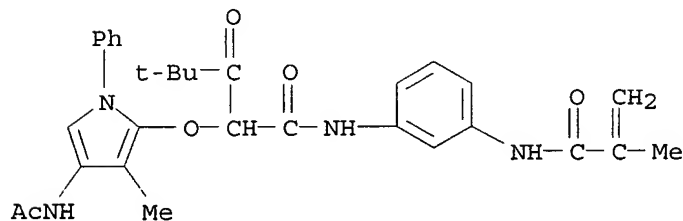
RN 108854-86-0 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 2-[[4-(acetylamino)-3-methyl-1-phenyl-1H-pyrrol-2-yl]oxy]-4,4-dimethyl-N-[3-[(2-methyl-1-oxo-2-propenyl)amino]phenyl]-3-oxopentanamide (9CI) (CA INDEX NAME)

CM 1

CRN 108854-85-9

CMF C30 H34 N4 O5

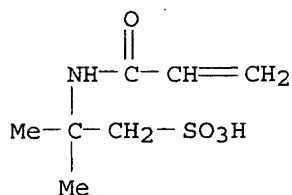


CM 2

KOROMA EIC1700

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IC ICM G03C007-30

ICS G03C007-26

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color development **photog**

IT **Photographic** couplers

(polymeric, development latitude in relation to)

IT **Photographic** emulsions

(**silver halide**, iodide contents in, developing latitude in relation to)

IT **Photographic** developers

(color, containing chelating agent)

IT **Photographic** development

(color, replenishing **solution** addition in)

IT 67-43-6 139-13-9 149-46-2 2809-21-4 35998-29-9

RL: USES (Uses)

(chelating agent, **photog. color developer solution** containing)

IT 85557-63-7 104603-61-4 108854-86-0 108926-63-2

RL: TEM (Technical or engineered material use); USES (Uses)

(**photog. coupler**, development latitude in relation to)

L15 ANSWER 42 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1986:600413 CAPLUS

DOCUMENT NUMBER: 105:200413

TITLE: **Silver halide**

**photosensitive** materials and their reducing treatment

INVENTOR(S): Kasama, Yasuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

KOROMA EIC1700

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61061146	A2	19860328	JP 1984-182457	19840831
PRIORITY APPLN. INFO.:			JP 1984-182457	19840831

AB Ag halide photog. materials contain  $\geq 1$  photosensitive Ag halide emulsion layer (A) and  $\geq 1$  nonphotosensitive upper layer (B), where  $\geq 1$  B is hardened with a polymer hardening agent so as to have a greater melting time than A and  $\geq 1$  A contains a polymer containing repeating units of monomers having functional groups crosslinkable with gelatin. Ag images obtained by exposing/developing the materials are reduced by treating with a reducing solution intercalating through B. Thus, a Ag halide photog. material was prepared by using an emulsion layer containing a polymer having the repeating unit-[CH<sub>2</sub>CH(p-C<sub>6</sub>H<sub>4</sub>SO<sub>2</sub>K)]- and a polymer hardening agent(I) having the repeating units -[CH<sub>2</sub>CH(CONHCH<sub>2</sub>NHCOCH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>CH:CH<sub>2</sub>)]y-(x:y = 3:1). Melting times of A and B were 680 and 1250 s, resp. Dot images obtained by using the material were soaked in a reducing solution cong. Ce(SO<sub>4</sub>)<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub>, showing 13.0% reduction, while a material prepared similarly without I (melting times of A and B were 680 s and 760 s) showed only 10.0% reduction

IT 26949-28-0 81998-90-5 85899-49-6  
105060-37-5

RL: USES (Uses)

(nonphotosensitive upper layer containing, for lith silver halide photog. materials, treatment for reduction of dot images from)

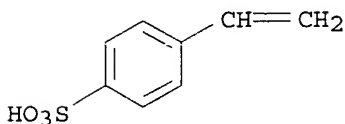
RN 26949-28-0 CAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, potassium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 4551-90-0

CMF C8 H8 O3 S . K



● K

RN 81998-90-5 CAPLUS

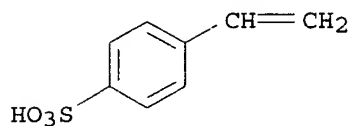
CN Benzenesulfonic acid, 4-ethenyl-, potassium salt, polymer with sodium 4-ethenylbenzenesulfonate (9CI) (CA INDEX NAME)



CM 1

CRN 4551-90-0

CMF C8 H8 O3 S . K

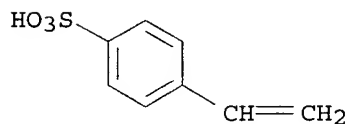


● K

CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na



● Na

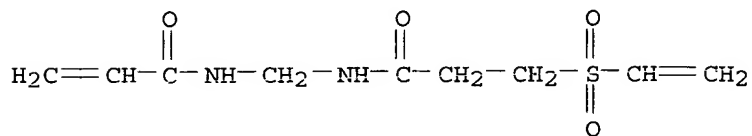
RN 85899-49-6 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N-[[[3-(ethenylsulfonyl)-1-oxopropyl]amino]methyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 85888-78-4

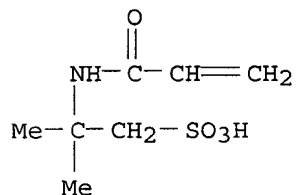
CMF C9 H14 N2 O4 S



CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

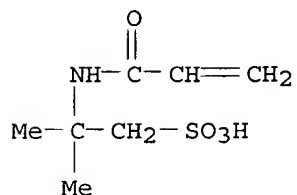
RN 105060-37-5 CAPLUS

CN Benzenesulfonic acid, 4-ethenyl-, potassium salt, polymer with  
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium  
salt (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

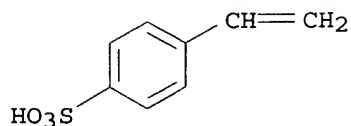


● Na

CM 2

CRN 4551-90-0

CMF C8 H8 O3 S . K



● K

IC ICM G03C001-30  
ICS G03C001-04

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **silver halide photog** material redn;  
**nonphotosensitive** upper layer **photog** material; polymer hardening agent **photog** material

IT Lithography  
(**silver halide photog.** materials with  
**nonphotosensitive** upper layer containing polymer additives for, treatment for reduction of dot images from)

IT **Photographic** films  
(lith, **nonphotosensitive** upper layer hardened with polymeric hardening agent, treatment for reduction of dot images from)

IT 26949-28-0 81998-90-5 85899-49-6  
105060-37-5  
RL: USES (Uses)  
(**nonphotosensitive** upper layer containing, for lith  
**silver halide photog.** materials, treatment  
for reduction of dot images from)

IT 7664-93-9, uses and miscellaneous  
RL: USES (Uses)  
(**photog. processing solution** containing cesium  
**sulfate** and, for reduction of dot images from lith **photog.**  
materials)

IT 10294-54-9  
RL: USES (Uses)  
(**photog. processing solution** containing sulfuric  
**acid** and, for reduction of dot images from lith **photog.**  
materials)

L15 ANSWER 43 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1986:196903 CAPLUS

DOCUMENT NUMBER: 104:196903

TITLE: **Silver halide color  
photographic** materials for processing without  
water washing

INVENTOR(S): Ishikawa, Masao; Koboshi, Shigeharu; Kuze, Satoru

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60239748	A2	19851128	JP 1984-95611	19840515
JP 05083899	B4	19931130		

PRIORITY APPLN. INFO.: JP 1984-95611 19840515

AB The claimed **photog.** material containing  $\geq 1$  kind of polymer coupler (prepared by polymerization of a monomer coupler). The **photog.** processing includes color **development**, **processing** with a **solution** having fixing capability (e.g., containing a **thiosulfate** salt), and treatment with a **photog.** stabilizer. In the stabilizing process the **thiosulfate** salt concentration in the last bath may be at  $2 + 10^{-5} - 5 + 10^{-3}$  M.

IT 101902-33-4

RL: USES (Uses)

(cyano **photog.** coupler)

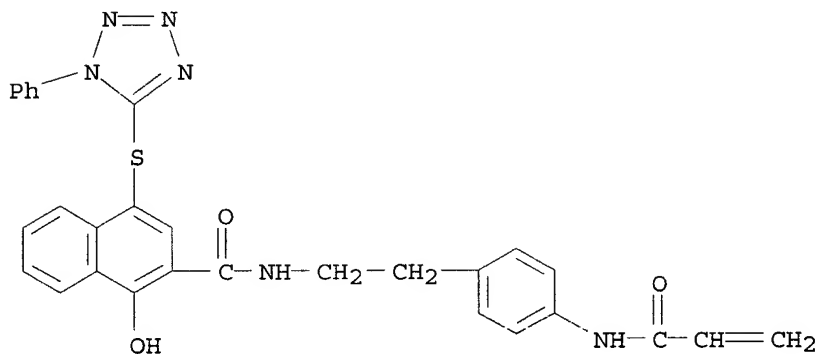
RN 101902-33-4 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 1-hydroxy-N-[2-[4-[(1-oxo-2-propenyl)amino]phenyl]ethyl]-4-[(1-phenyl-1H-tetrazol-5-yl)thio]-2-naphthalenecarboxamide (9CI) (CA INDEX NAME)

CM 1

CRN 101902-32-3

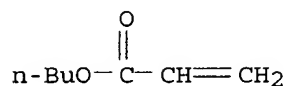
CMF C29 H24 N6 O3 S



CM 2

CRN 141-32-2

CMF C7 H12 O2



IT 101182-79-0 101902-30-1 101902-31-2

RL: TEM (Technical or engineered material use); USES (Uses)  
(magenta **photog.** coupler)

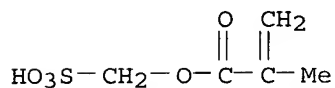
RN 101182-79-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, sulfomethyl ester, sodium salt, polymer with butyl 2-propenoate and N-[1-(2,5-dichlorophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 101182-78-9

CMF C5 H8 O5 S . Na

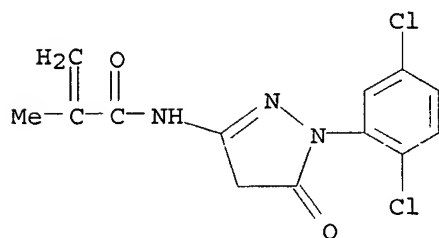


● Na

CM 2

CRN 85546-84-5

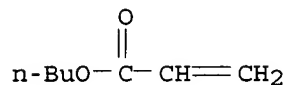
CMF C13 H11 Cl2 N3 O2



CM 3

CRN 141-32-2

CMF C7 H12 O2



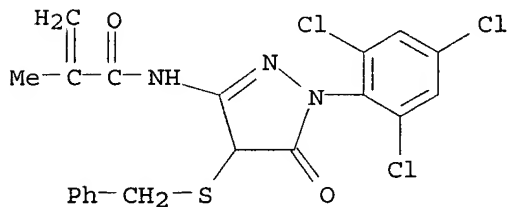
RN 101902-30-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with  
N-[4,5-dihydro-5-oxo-4-[(phenylmethyl)thio]-1-(2,4,6-trichlorophenyl)-1H-  
pyrazol-3-yl]-2-methyl-2-propenamide and 2-hydroxyethyl  
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 101902-29-8

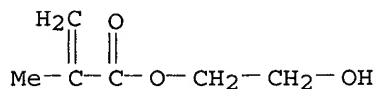
CMF C20 H16 Cl3 N3 O2 S



CM 2

CRN 868-77-9

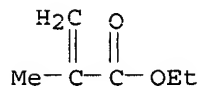
CMF C6 H10 O3



CM 3

CRN 97-63-2

CMF C6 H10 O2



RN 101902-31-2 CAPLUS

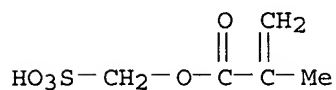
KOROMA EIC1700

CN 2-Propenoic acid, butyl ester, polymer with N-[1-(2,3-dichlorophenyl)-4,5-dihydro-5-oxo-1H-pyrazol-3-yl]-2-methyl-2-propenamide and sulfomethyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 101182-78-9

CMF C5 H8 O5 S . Na

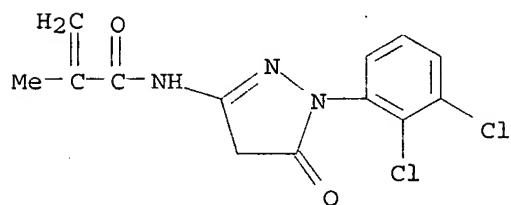


● Na

CM 2

CRN 98208-78-7

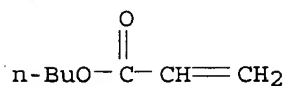
CMF C13 H11 Cl2 N3 O2



CM 3

CRN 141-32-2

CMF C7 H12 O2



IC ICM G03C007-30

ICS G03C007-32

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST color photog material polymer coupler; silver

KOROMA EIC1700

halide color photog processing  
 IT **Photographic couplers**  
 (polymeric, silver halide color photog.  
 materials containing)  
 IT 101902-33-4  
 RL: USES (Uses)  
 (cyano photog. coupler)  
 IT 101182-79-0 101902-30-1 101902-31-2  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (magenta photog. coupler)  
 IT 101996-40-1  
 RL: USES (Uses)  
 (yellow photog. coupler)

L15 ANSWER 44 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:532282 CAPLUS

DOCUMENT NUMBER: 103:132282

TITLE: **Photographic silver halide**  
 recording material

INVENTOR(S): Himmelman, Wolfgang; Sackmann, Guenter; Meyer, Rudolf

PATENT ASSIGNEE(S): Agfa-Gevaert A.-G. , Fed. Rep. Ger.

SOURCE: Ger. Offen., 43 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3331542	A1	19850321	DE 1983-3331542	19830901
EP 136506	A2	19850410	EP 1984-109878	19840820
EP 136506	B1	19880803		
EP 136506	A3	19870325		
R: BE, CH, DE, FR, GB, LI				
US 4524131	A	19850618	US 1984-643159	19840822
JP 60156056	A2	19850816	JP 1984-179524	19840830
JP 05074808	B4	19931019		
CA 1217081	A1	19870127	CA 1984-462142	19840830

PRIORITY APPLN. INFO.: DE 1983-3331542 19830901

AB **Photog.** materials having decreased adhesion of the outer layer  
 and high smoothness and transparency after processing contain in the outer  
 layer a combination of a hydrophilic colloid and alkali **processing**  
**solution-soluble** preformed polymer particles with a particle  
 size  $\leq 10 \mu\text{m}$ . Especially useful are graft copolymers of methacrylate  
 and Me methacrylate on  $\alpha$ -olefin- or styrene-maleic **acid**  
 semiamide copolymers or the alkali salts of alternating copolymers from  
 maleic anhydride and  $\alpha$ -olefins or styrene of particle size 0.5-8  
 $\mu\text{m}$  and a particle size distribution of  $\pm 1 \mu\text{m}$ . Thus, an  
 unhardened color neg. film was coated with a composition containing 15% **aq**  
 . gelatin 400, 4% **aqueous** C8F17SO3-N+Et4 80, water 2800, and a  
 maleic **acid** semiamide-methacrylic **acid**-Me



methacrylate-styrene copolymer (particle size distribution between .apprx.0.4 and .apprx.2.5  $\mu$ m) 4 g to give a surface protective layer of 0.6-0.7 g/m<sup>2</sup> (dry). The resultant material showed <10% of the surface adhering, 200-250 g of force to remove the film from a cartridge, 0-5% dye stains, a granularity of 1.8, and a surface smoothness before and after processing of 80 and 94%, resp., vs 80-90%, 1000-1500 g, 20-50%, 1.8, and 94 and 95%, resp., for a control containing no polymer particle.

IT 9080-79-9

RL: USES (Uses)

(photog. material with surface layer containing hydrophilic colloid and alkali solution-soluble polymer and, with improved antiblocking properties and smoothness and transparency)

RN 9080-79-9 CAPLUS

CN Benzenesulfonic acid, ethenyl-, homopolymer, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 50851-57-5

CMF (C8 H8 O3 S)x

CCI PMS

CM 2

CRN 26914-43-2

CMF C8 H8 O3 S

CCI IDS



D1-CH=CH<sub>2</sub>

D1-SO<sub>3</sub>H

IC ICM G03C001-10

ICS C08L051-06; C08J003-06

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST surface adhesion photog film particle; smoothness surface photog film particle; transparency surface photog film particle; polymer particle surface photog film; gelation surface photog film; acetylgelatin surface photog film

IT Photographic films

Photographic paper

(with outer layer containing hydrophilic colloid and alkali soln

KOROMA EIC1700

.-soluble polymer particles for decreased adhesion and improved smoothness and transparency)

IT 98152-74-0

RL: USES (Uses)

(graft, photog. materials with surface layer containing hydrophilic colloid and, for decreased adhesion and improved smoothness and transparency)

IT 9003-39-8 9032-43-3

RL: USES (Uses)

(photog. material with surface layer containing alkali solution-soluble polymer particles with layer of, for decreased adhesion and improved smoothness and transparency)

IT 107-35-7D, reaction products with tetrakis(vinylsulfonylmethyl)methane 1343-98-2 3825-26-1 9011-14-7 9080-79-9 56773-42-3

60345-53-1D, reaction products with taurine 63629-89-0 65411-60-1

RL: USES (Uses)

(photog. material with surface layer containing hydrophilic colloid and alkali solution-soluble polymer and, with improved antiblocking properties and smoothness and transparency)

L15 ANSWER 45 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1984:601356 CAPLUS

DOCUMENT NUMBER:

101:201356

TITLE:

Silver halide photographic

material for photomechanical process and

method for its reduction processing

Kasama, Yasuo; Nobuaki, Inoue; Kuwabara, Kenichi

Fuji Photo Film Co., Ltd., Japan

Eur. Pat. Appl., 52 pp.

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 114699	A2	19840801	EP 1984-100728	19840124
EP 114699	A3	19870121		
R: DE, GB				
JP 59135456	A2	19840803	JP 1983-9612	19830124
JP 02035970	B4	19900814	US 1987-21570	19870302
US 4746594	A	19880524	JP 1983-9612	19830124
PRIORITY APPLN. INFO.:			US 1984-573176	19840123
			US 1985-800101	19851122

AB A photog. material for photomech. process comprises a support, a photosensitive Ag halide emulsion layer and a light-insensitive upper layer having a melting time greater than the melting time of the emulsion layer. The emulsion contains an additive selected from starch, modified starch and macromol. polysaccharide. Thus, a poly(ethylene terephthalate) support was coated with a Au-S-sensitized

emulsion (AgCl 80, AgBr 19.5 and AgI 0.5 mol %) containing gelatin at 45 weight %

of Ag halide, a spectral sensitizer, a stabilizer, a polymer latex (US Patent 3,525,620), polyoxyethylene nonyl Ph ether, a hardener, hydroxypropyl starch 0.48 g/m2, overcoated with a composition containing gelatin,

the above polymer latex, a PMMA latex, a polymeric hardener  $(\text{CH}_2\text{CHCONHC}(\text{Me})_2\text{CH}_2\text{SO}_3\text{Na})_x(\text{CH}_2\text{CHCONHCH}_2\text{NHCOCCH}_2\text{CH}_2\text{SO}_2\text{CH}=\text{CH}_2)_y$  ( $x/y = 3/1$ ) at 80 mg/m2, imagewise exposed to a W lamp for 10 s, **developed** in a **solution** containing  $\text{Na}_2\text{CO}_3$ ,  $\text{HCOH-H}_2\text{S}$  adduct, KBr, hydroquinone,  $\text{Na}_2\text{SO}_3$ , and dipped in a reducing **solution** containing ceric **sulfate** 25, concentration  $\text{H}_2\text{SO}_4$  30 g, and  $\text{H}_2\text{O}$  1 L. The material has lower swelling degree and much greater reduction width than a starch-free control.

IT 85899-49-6

RL: USES (Uses)

(**photog.** material for **photomech.** process with emulsion layer containing starch and **photoinsensitive** layer containing)

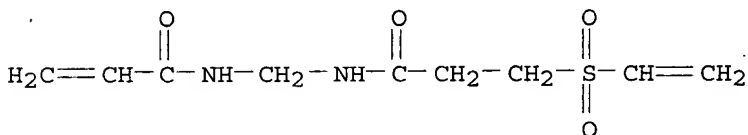
RN 85899-49-6 CAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N-[[[3-(ethenylsulfonyl)-1-oxopropyl]amino]methyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 85888-78-4

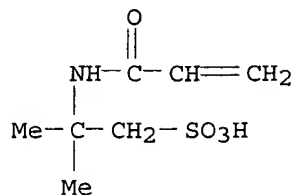
CMF C9 H14 N2 O4 S



CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

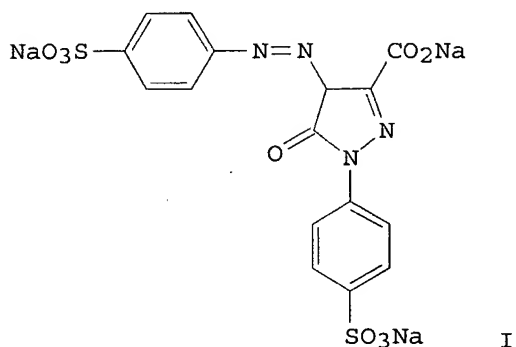


● Na

IC G03F001-00; G03C001-76  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST photomech process photog film; printing plate  
 transparency photog film  
 IT Photographic films  
 (for photomech. process)  
 IT Printing plates  
 (photog. material for fabrication of)  
 IT 4866-61-9 9004-53-9 9005-84-9 9016-45-9 9049-76-7 9057-02-7  
 66710-66-5 92991-00-9  
 RL: USES (Uses)  
 (photog. material for photomech. process with  
 emulsion layer containing)  
 IT 9011-14-7 85899-49-6  
 RL: USES (Uses)  
 (photog. material for photomech. process with  
 emulsion layer containing starch and photoinsensitive layer  
 containing)  
 IT 62-56-6, uses and miscellaneous 7647-01-0, uses and miscellaneous  
 7664-93-9, uses and miscellaneous 13590-82-4 15708-41-5  
 RL: USES (Uses)  
 (reducing solution containing, in processing of  
 photog. material for photomech. process)

L15 ANSWER 46 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1984:183326 CAPLUS  
 DOCUMENT NUMBER: 100:183326  
 TITLE: Radiographic image forming  
 INVENTOR(S): Sakamoto, Eiichi; Kawasaki, Mikio; Ono, Kouji;  
 Fukuoji, Kakujulo; Fujimori, Noboru  
 PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd. , Japan  
 SOURCE: Eur. Pat. Appl., 50 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 101295	A2	19840222	EP 1983-304608	19830809
EP 101295	A3	19850814		
EP 101295	B1	19880629		
R: DE, FR, GB				
JP 59030535	A2	19840218	JP 1982-140743	19820812
JP 60058458	B4	19851220		
US 4500631	A	19850219	US 1983-520829	19830805
PRIORITY APPLN. INFO.:			JP 1982-140743	19820812
GI				



AB A radiog. imaging method is described providing images with improved sharpness by reducing the effect of light cross-over. The method employs (1) a **photog.** material comprising a support coated on both sides with a layer containing **photosensitive Ag** halide particles, substantially non-**photosensitive** metal salt particles with an adsorbed dissoln. retarder, phys. **development** nuclei, and H<sub>2</sub>O-soluble dyes or a compound comprising the dye coupled to a non-diffusive mordant and (2) a **developer solution** containing a reducing agent and a substance capable of dissolving metallic salt particles. Thus, a sublayered poly(ethylene terephthalate) support was coated on both sides with a AgCl emulsion (average particle size 0.1 μ) containing 1-phenyl-5-mercaptotetrazole 1.2 g/mol AgCl, phys. development nuclei in the form of chlorauric acid 120 mg/mol AgCl, dye I 4 mg/m<sup>2</sup> to give a layer (acting as the metallic salt particle layer) with a **Ag** coating weight of 1 g/m<sup>2</sup>, overcoated with a **Ag**(Br,I) emulsion (3.5 mol.% AgI) which was S-, Au-sensitized, containing 4-hydroxy-6-methyl-1,3,3a,7-tetraazaindene 0.2 g/mol **Ag** halide to give a **Ag** coating weight of 3 g/m<sup>2</sup>, stored at 55° and 20% relative humidity for 3 days, imagewise exposed, and **developed** in a **solution** containing Phenidone 1, Na<sub>2</sub>SO<sub>3</sub> 60, hydroquinone 16, KBr 2, K<sub>2</sub>CO<sub>3</sub> 35 g, 5-methylbenzotriazole 40 mg, 25% glutaric aldehyde 5 mL, H<sub>2</sub>O to 1 L to provide an image with γ 3, fog d. 0.07, and relative sensitivity 100.

IT 89761-66-0  
RL: USES (Uses)

(photog. element containing photosensitive emulsion layer and non-photosensitive metal salt particles and layer containing non-photosensitive metal salt particles and, for radiog. imaging, with reduced light cross-over effect)

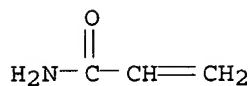
RN 89761-66-0 CAPLUS

CN 1H-Imidazolium, 1-ethenyl-2,3-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1

CMF C3 H5 N O



CM 2

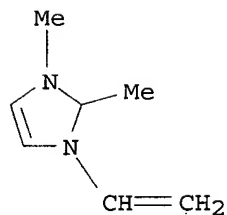
CRN 3974-66-1

CMF C7 H11 N2 . C7 H7 O3 S

CM 3

CRN 45657-58-7

CMF C7 H11 N2

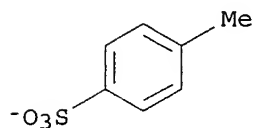


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 4

CRN 16722-51-3

CMF C7 H7 O3 S



IC G03C005-16; G03C005-54  
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST radiog contrast image **photog** film  
 IT **Photographic** developers  
 (for radiog. films, for reduced light cross-over effect)  
 IT Radiography  
 (photog. element for, reduction of light cross-over effect in)  
 IT **Photographic** films  
 (radiog., reduction of light cross-over effect in)  
 IT 86-93-1 15182-68-0 16903-35-8 66099-77-2 75151-27-8 89761-64-8  
 89761-65-9 89761-66-0 89761-68-2  
 RL: USES (Uses)  
 (photog. element containing **photosensitive** emulsion layer and non-**photosensitive** metal salt particles and layer containing non-**photosensitive** metal salt particles and, for radiog. imaging, with reduced light cross-over effect)  
 IT 92-43-3 111-30-8 123-31-9, uses and miscellaneous 136-85-6  
 584-08-7 7757-83-7 7758-02-3, uses and miscellaneous  
 RL: USES (Uses)  
 (photog. processing solution containing, for radiog. materials)

L15 ANSWER 47 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:165375 CAPLUS

DOCUMENT NUMBER: 100:165375

TITLE: **Photosensitive silver halide photographic material**

INVENTOR(S): Iijima, Toshifumi; Koboshi, Shigeharu; Yamazaki, Hiroshi

PATENT ASSIGNEE(S): Konishiroku Photo Industry Co., Ltd. , Japan

SOURCE: Brit. UK Pat. Appl.; 16 pp.  
 CODEN: BAXXDU

DOCUMENT TYPE: Patent

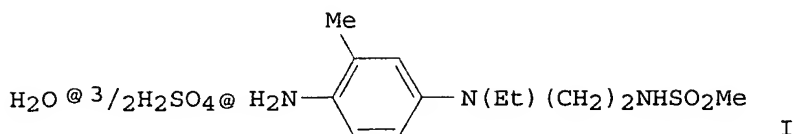
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2113416	A1	19830803	GB 1983-1306	19830118
GB 2113416	B2	19851016		
JP 58126525	A2	19830728	JP 1982-7972	19820120
JP 03021897	B4	19910325		
US 4491627	A	19850101	US 1983-456780	19830110

DE 3301819 A1 19830908 DE 1983-3301819 19830120  
 PRIORITY APPLN. INFO.: JP 1982-7972 19820120  
 GI



AB A Ag halide color photog. material which can be used in forming a dye image by 1-bath processing is comprised of  $\geq 1$  hydrophilic colloid layer containing a processing reagent microencapsulated with a wall material which can be dissolved at  $\text{pH} \geq 7$ . The processing reagent is a reducing agent, an oxidizing agent, or a Ag halide solvent. The wall material of the microcapsules is prepared from a vinyl polymer having pendant carboxyl or sulfonic acid groups, a copolymer of methacrylic acid, acrylic acid or sulfonic acid with a vinyl ketone, styrene, or a methacrylate, or a condensation product of lysine with a polycarboxylic acid chloride. Thus, a solution of developer I 13 g in  $\text{H}_2\text{O}$  40 mL was dispersed with a solution of bis(2-ethylhexyl)sulfosuccinate Na salt 12 and polyoxyethylene 4-lauryl ether 6 g in hexane 80 mL, mixed with methacrylic acid 10 g, N,N'-methylenebisacrylamide 100 mg Na riboflavin-5'-phosphate 5 and K persulfate 1 mg, irradiated with light until the monomers disappeared, the hexane solvent evaporated, and the microcapsules (100-300 nm sizes) isolated by centrifugation. A photog. film prepared with a Ag(Br, Cl) emulsion containing a magenta coupler [1-(2,4,6-trichlorophenyl)-3[2-chloro-5[1-(octadecyl)succinimido]anilino]-5-pyrazolone] and the I-containing microcapsules was stored for 2 days at  $55^\circ$ , light exposed, and processed to give a relative sensitivity of 195, a log of 0.07, and a  $D_{\text{max}}$  of 2.228 vs. 70, 0.30, and 0.80, resp., for a control using non-microencapsulated I.

IT 54617-51-5

RL: USES (Uses)

(photog. films containing microencapsulated developing solns. containing, for improved stability and color d.)

RN 54617-51-5 CAPLUS

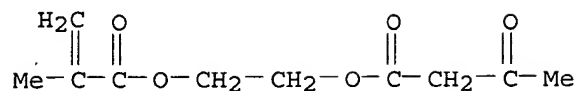
CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with N-(1-methylethyl)-2-propenamide and 3-sulfopropyl 2-methyl-2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 21282-97-3

CMF C10 H14 O5

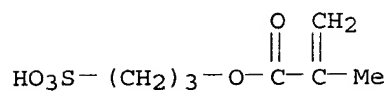




CM 2

CRN 10548-16-0

CMF C7 H12 O5 S . Na

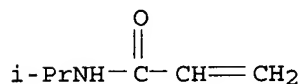


● Na

CM 3

CRN 2210-25-5

CMF C6 H11 N O



IC G03C001-06

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST microencapsulated processing agent **photog** emulsion

IT **Photographic** processing

(color, 1-bath, of **photog.** materials containing **processing** agents in alkaline-soluble microcapsules)

IT **Photographic** emulsions

**Photographic** films

(color, containing **processing** agents in alkali-soluble microcapsules for improved stability and color d.)

IT **Photographic** developers

(color, **photog.** materials containing microencapsulated, for improved stability and color d.)

IT Encapsulation

(micro-, of **photog.** processing agents in **photog.** materials by alkaline-soluble polymers by light irradiation)

IT 14023-85-9

KOROMA EIC1700

RL: USES (Uses)

(microencapsulation of **photog. processing solns.** containing, in **photog.** materials for improved stability and color d.)

IT 577-11-7 5274-68-0 25646-71-3 54617-51-5 62149-57-9

RL: USES (Uses)

(**photog.** films containing microencapsulated **developing solns.** containing, for improved stability and color d.)

IT 22251-85-0

RL: USES (Uses)

(**photoinduced** microcapsulation of **photog.** processing agents by methacrylic **acid-methylenebisacrylamide** and, in **photog.** materials for improved stability and color d.)

IT 79-41-4, uses and miscellaneous 110-26-9

RL: USES (Uses)

(**photoinduced** microencapsulation of **photog.** processing agents by methylenebisacrylamide and, in **photog.** materials for improved stability and color d.)

L15 ANSWER 48 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:461689 CAPLUS

DOCUMENT NUMBER: 99:61689

TITLE: Hydrazide compositions and **photographic** materials containing them

INVENTOR(S): Evans, Gareth Bryn; Magee, Paul Mary

PATENT ASSIGNEE(S): Kodak Ltd., UK

SOURCE: Brit. UK Pat. Appl., 15 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent

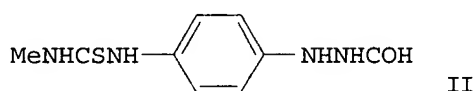
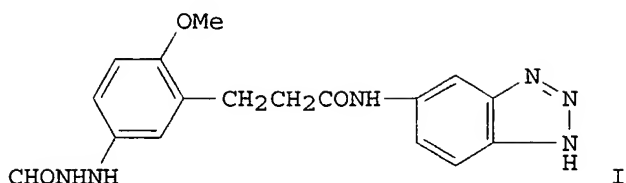
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2107074	A1	19830420	GB 1982-25039	19820902
GB 2107074	B2	19840912		
CA 1170886	A1	19840717	CA 1982-410527	19820831
US 4416969	A	19831122	US 1982-413903	19820901
PRIORITY APPLN. INFO.:			GB 1981-26621	19810902

GI



AB A **Ag** halide **photog.** element containing a nucleating agent combination comprising a N-containing heterocyclic group-substituted phenylhydrazide and a thiourea-substituted phenylhydrazide exhibits a synergistic speed increase and improved contrast. Thus, a poly(ethylene terephthalate) support was coated with a layer containing magenta RDR 0.45, gelatin 1.35 g/m<sup>2</sup>, a layer containing a green-sensitized **Ag** emulsion 0.35, gelatin 1 g/m<sup>2</sup>, 2-(2-octadecyl)-5-sulfohydroquinone K salt 1.2 g/mol, I 75, II 15 mg/mol **Ag** halide, overcoated with a layer containing didodecyl hydroquinone 0.4, gelatin 0.8 g/m<sup>2</sup>, imagewise exposed, **processed** with a **solution** containing KOH 28, 5-methylbenzotriazole 1, 11-aminoundecanoic **acid** 2, KBr 2 g, benzyl alc. 8 mL, H<sub>2</sub>O to 1 L (pH = 13.5), laminated with a receiver containing poly(styrene-N-vinylbenzyl-N-benzyl-N,N-dimethylammonium **sulfate** -divinylbenzene) mordant to give an image with a d. of 1.8.

IT 81313-45-3

RL: USES (Uses)

(**photog.** color element containing)

RN 81313-45-3 CAPLUS

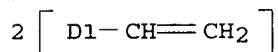
CN Benzenemethanaminium, ar-ethenyl-N,N-dimethyl-N-(phenylmethyl)-, sulfate (1:2), polymer with diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0

CMF C10 H10

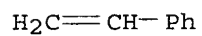
CCI IDS



CM 2

CRN 100-42-5

CMF C8 H8



CM 3

CRN 81313-44-2

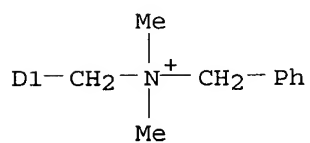
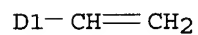
CMF C18 H22 N . 1/2 O4 S

CM 4

CRN 72688-67-6

CMF C18 H22 N

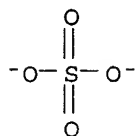
CCI IDS



CM 5

CRN 14808-79-8

CMF O4 S



- IC G03C001-485
- CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST hydrazide deriv nucleating agent **photog**; phenylhydrazide deriv nucleating agent **photog**
- IT Hydrazides
  - RL: USES (Uses)
    - (**photog. silver** nucleating agent combinations containing heterocyclic group- and thiourea-substituted)
- IT **Photography**, color
  - (diffusion-transfer, **silver** nucleating agent combination for, containing heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
- IT **Photographic emulsions**
  - (lith, reversal, direct, **silver** nucleating agent combination for, containing heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
- IT **Photographic emulsions**
  - (reversal, direct, **silver** nucleating agent combination for, containing heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
- IT 65293-89-2 66172-61-0 72688-53-0 79859-19-1 79859-20-4  
81313-45-3
  - RL: USES (Uses)
    - (**photog.** color element containing)
- IT 63401-97-8 63402-00-6 63402-01-7 69447-70-7 73583-54-7  
86467-81-4
  - RL: USES (Uses)
    - (**photog.** color material containing, increased nucleation speed in)
- IT 100-44-7D, reaction product with poly(vinylimidazole) 121-44-8, uses and miscellaneous 9002-89-5 25232-42-2D, reaction product with benzyl chloride 86467-82-5
  - RL: USES (Uses)
    - (**photog.** diffusion-transfer element containing)
- IT 497-19-8, uses and miscellaneous 1936-57-8
  - RL: USES (Uses)
    - (**photog. processing solution** containing, for diffusion-transfer element containing nucleating agent combination consisting of heterocyclic group substituted phenylhydrazide and thiourea substituted phenylhydrazide)
- IT 100-51-6, uses and miscellaneous 123-31-9, uses and miscellaneous 136-85-6 1310-58-3, uses and miscellaneous 2432-99-7 7757-83-7 7758-02-3, uses and miscellaneous

RL: USES (Uses)

(**photog. processing solution** containing, for  
diffusion-transfer element containing nucleating agent combination  
consisting of heterocyclic group-substituted phenylhydrazide and  
thiourea-substituted phenylhydrazide)

L15 ANSWER 49 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:627420 CAPLUS

DOCUMENT NUMBER: 97:227420

TITLE: **Silver** complex diffusion-transfer  
**photographic photosensitive** material

PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57019730	A2	19820202	JP 1980-90828	19800703
JP 63035012	B4	19880713		

PRIORITY APPLN. INFO.: JP 1980-90828 19800703

AB **Ag** complex diffusion-transfer **photog.**

**photosensitive** materials contain water-dispersible polymer particles and  $\geq 1$  compound of the formula RZR1 (R = SH or its precursor; Z = divalent hydrocarbon moiety; R1 = solubilizing group). The addition of the polymer improves the storage stability and processibility and also prevents the lowering of the contrast by the **Ag** complexing agent. Thus, S-acetylthiosalicylic acid and an acrylic acid-Et acrylate copolymer latex were added to a **Ag** (Br,Cl) emulsion and the emulsion was coated on a polyethylene-coated paper support to give a **Ag** complex diffusion-transfer **photog.** sheet. The sheet was imagewise exposed, contacted with a receptor sheet containing PdS by using a **processing solution** to give **photog.** images having high-contrast, and a high-quality lithog. plate was prepared from the receptor sheet.

IT 83789-99-5

RL: USES (Uses)

(silver complex diffusion-transfer **photog.****photosensitive** materials containing mercapto compound type complexing agent and)

RN 83789-99-5 CAPLUS

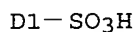
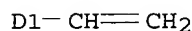
CN 2-Propenoic acid, ethyl ester, polymer with ethenylbenzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 26914-43-2

CMF C8 H8 O3 S

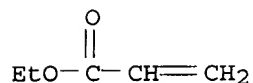
CCI IDS



CM 2

CRN 140-88-5

CMF C5 H8 O2



IC G03C001-06

ICA G03C005-54

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST silver complex diffusion transfer photog;  
photog silver complexing agent; lithog plate  
photog prepn

IT Lithographic plates  
(silver complex diffusion-transfer photog.  
materials for preparation of)

IT Photographic paper  
(silver complex diffusion-transfer, complexing agents and  
polymeric additives for)

IT 25085-35-2 25119-83-9 25212-88-8 25322-25-2 53302-81-1  
83789-99-5

RL: USES (Uses)  
(silver complex diffusion-transfer photog.  
photosensitive materials containing mercapto compound type complexing  
agent and)

IT 70-49-5 107-03-9 147-93-3 55819-78-8

RL: USES (Uses)  
(silver complexing agent, for silver complex  
diffusion-transfer photog. materials)

L15 ANSWER 50 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1981:74671 CAPLUS

KOROMA EIC1700

DOCUMENT NUMBER: 94:74671  
 TITLE: Graft polymers as layers for controlling diffusion in  
 photographic products  
 INVENTOR(S): Sullivan, Charles Irving  
 PATENT ASSIGNEE(S): Polaroid Corp., USA  
 SOURCE: Ger. Offen., 54 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2910271	A1	19800925	DE 1979-2910271	19790315
DE 2910271	C2	19890105		
AU 526792	B2	19830203	AU 1979-44638	19790227
AU 7944638	A1	19800904		
FR 2451593	A1	19801010	FR 1979-6798	19790316
FR 2451593	B1	19871204		

PRIORITY APPLN. INFO.: DE 1979-2910271 19790315

AB **Photog.** diffusion-transfer film units contain: 1) a **photosensitive** element with  $\geq 1$  **photosensitive** Ag halide emulsion layer which contains a diffusible image-forming material which is **soluble** in the **developer**; 2) an image-receiving element; 3) a means of distributing an alkaline developer in the film unit; and 4) a layer for control of diffusion in the **photosensitive** element and/or in the image-receiving element. The layer for control of diffusion produces a polymer from a monomer which undergoes  $\beta$ -elimination in alkaline **solution** to give a polymer containing the repeating units  $[Z(CO_2CRR_1CHR_2R_3)]$  (Z = the addition polymerization

product of an ethylenically unsatd. C2-5 aliphatic group; R, R<sub>1</sub>, R<sub>2</sub> = H, Me, Ph but not more than 1 of R, R<sub>1</sub>, and R<sub>2</sub> can be Me or Ph; R<sub>3</sub> = an active group). Thus, an image-receiving element was prepared by coating on a transparent poly(ethylene terephthalate) support the following: 1) an **acidic** polymer layer (26.91 g/m<sup>2</sup>) containing the partial Bu ester of ethylene-maleic anhydride copolymer mixed with .apprx.10 weight% poly(vinyl butyral); 2) a retardation layer containing 5.38 mg/m<sup>2</sup> of inoculation nuclei of 100 weight parts of a diacetone acrylamide-acrylic **acid**-Na 2-acrylamido-2-methylpropanesulfonate copolymer (87.5:2:0.5) around which 49 weight parts of 2-cyanoethyl acrylate are polymerized; 3) an image-receiving layer with 3.23 g/m<sup>2</sup> of a coating from a mixture of poly(vinyl alc.) 6, poly(vinylpyridine) 3, and a graft polymer of 4-vinylpyridine-vinylbenzyltrimethylammonium chloride on hydroxyethyl cellulose 1 weight part. A developer containing H<sub>2</sub>O 100, benzotriazole 1.12, hydroxyethyl CM-cellulose 4.02, 50% KOH **solution** 4.15, and thymolphthalein 0.50 g was introduced between the polymeric test layer and the transparent element at a thickness of .apprx.0.07 mm. The penetration time, i.e. the time required for the developer to penetrate the retardation layer and react with the polymeric **acid** to lower the pH value, was determined on the basis of the color change from blue to colorless. The time at



which the layer starts to change color and the time at which it is completely clear were 280 and 325 s, resp., for a coating weight of 5.38 mg/m<sup>2</sup> vs. 180 and 210 s, resp., for a control retardation layer containing 5.38 mg/m<sup>2</sup> of a Bu acrylate-diacetone acrylamide-styrene-methacrylic acid copolymer (60:30:4:6).

IT 76468-15-0 76468-16-1

RL: USES (Uses)

(graft, retardation layer containing, for color diffusion-transfer photog. films)

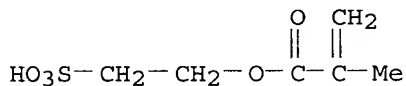
RN 76468-15-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-cyanoethyl ester, polymer with butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate) and 2-sulfoethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 10595-80-9

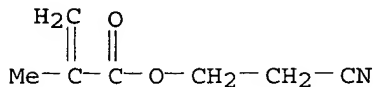
CMF C6 H10 O5 S



CM 2

CRN 4513-53-5

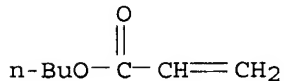
CMF C7 H9 N O2



CM 3

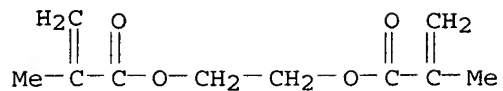
CRN 141-32-2

CMF C7 H12 O2



CM 4

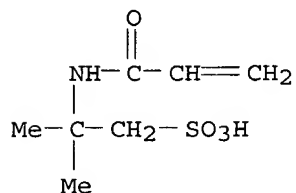
CRN 97-90-5  
CMF C10 H14 O4



RN 76468-16-1 CAPLUS  
CN 2-Propenoic acid, polymer with 2-cyanoethyl 2-propenoate,  
N-(1,1-dimethyl-3-oxobutyl)-2-propenamide and 2-methyl-2-[(1-oxo-2-  
propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX  
NAME)

CM 1

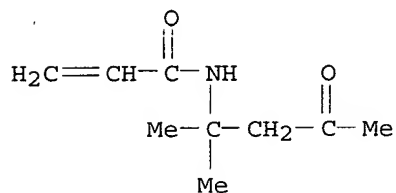
CRN 5165-97-9  
CMF C7 H13 N O4 S . Na



● Na

CM 2

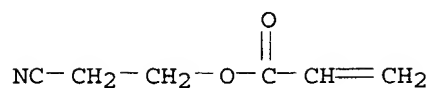
CRN 2873-97-4  
CMF C9 H15 N O2



CM 3

CRN 106-71-8

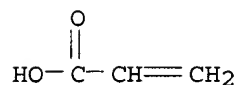
CMF C6 H7 N O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



IT 76468-43-4 76483-76-6

RL: USES (Uses)

(retardation layer containing, for color diffusion-transfer photog  
. films)

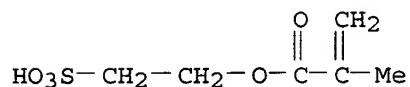
RN 76468-43-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-cyanoethyl  
2-propenoate and 2-sulfoethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 10595-80-9

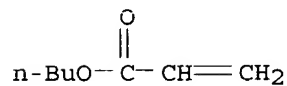
CMF C6 H10 O5 S



CM 2

CRN 141-32-2

CMF C7 H12 O2

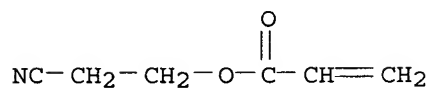


KOROMA EIC1700

CM 3

CRN 106-71-8

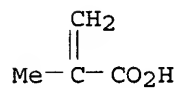
CMF C6 H7 N O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



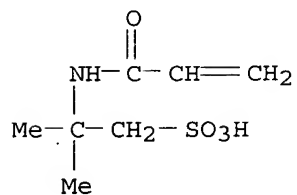
RN 76483-76-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-cyanoethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

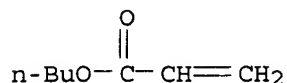
CMF C7 H13 N O4 S



CM 2

CRN 141-32-2

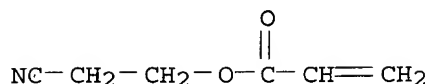
CMF C7 H12 O2



CM 3

CRN 106-71-8

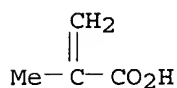
CMF C6 H7 N O2



CM 4

CRN 79-41-4

CMF C4 H6 O2



IC G03C005-54

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST retardation layer **photog** graft polymer

IT Vinyl acetal polymers

RL: USES (Uses)

(butyrals, **acid** layer containing, for color diffusion-transfer **photog.** film)

IT **Photographic** films

(color, diffusion-transfer, graft polymers as retardation layers for)

IT 9006-26-2D, partial Bu ester

RL: USES (Uses)

(**acid** layer containing, for color diffusion-transfer **photog.** film)

IT 9059-98-7 76468-53-6

RL: USES (Uses)

(graft, in image-receiving layers of color diffusion-transfer **photog.** films with graft polymer retardation layers)

IT 106-71-8D, polymers 76468-15-0 76468-16-1 76468-42-3

76468-44-5

RL: USES (Uses)

(graft, retardation layer containing, for color diffusion-transfer

photog. films)

IT 76468-17-2 76468-43-4 76468-45-6 76468-46-7  
76483-76-6

RL: USES (Uses)

(retardation layer containing, for color diffusion-transfer photog  
. films)

L15 ANSWER 51 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:74670 CAPLUS

DOCUMENT NUMBER: 94:74670

TITLE: Graft polymer as a layer for controlling diffusion in  
photographic products

INVENTOR(S): Taylor, Lloyd David; Sullivan, Charles Irving; Bedell,  
Stanley Frank

PATENT ASSIGNEE(S): Polaroid Corp., USA

SOURCE: Ger. Offen., 54 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2910270	A1	19800925	DE 1979-2910270	19790315
DE 2910270	C2	19881103		

PRIORITY APPLN. INFO.: DE 1979-2910270 19790315

AB Photog. diffusion-transfer film units contain: a) a  
photosensitive element with  $\geq 1$  photosensitive  
Ag halide emulsion layer containing an image-forming material which is  
soluble and diffusible in the developer; b) an  
image-receiving element; c) a means of distributing an alkaline developer in  
the film unit; and d) a layer for diffusion control in the  
photosensitive element and/or the image-receiving element. The  
diffusion-control or retardation layer contains a graft polymer with an  
organic polymer framework on which are grafted repeating units of a  
hydrophobic monomer and repeating units of a monomer which undergoes  
 $\beta$ -elimination in alkaline solution and has the formula  
RCO<sub>2</sub>CR<sub>1</sub>R<sub>2</sub>CHR<sub>3</sub>R<sub>4</sub> [R = ethylenically unsatd. C<sub>2</sub>-5 aliphatic group; R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> =  
H, Me, or Ph; and not more than 1 of R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> are Me or Ph; R<sub>4</sub> is an  
active group, SO<sub>2</sub>R<sub>5</sub> (R<sub>5</sub> = MeC<sub>6</sub>H<sub>4</sub>, Me, OEt, Ph, NMe<sub>2</sub>, NEt<sub>2</sub>, N(CH<sub>2</sub>Ph)<sub>2</sub>),  
R<sub>6</sub>CO (R<sub>6</sub> = OEt, Me, H, NH<sub>2</sub>, NMe<sub>2</sub>, NEt<sub>2</sub>), R<sub>7</sub>SO (R<sub>7</sub> = Ph, Me, Et), CN, or  
NO<sub>2</sub>]. The organic framework polymers are cellulose polymers, vinyl polymers,  
or gelatin. Thus, a test film was prepared by coating a 4-mil poly(ethylene  
terephthalate) support with a 1-mil layer of an acid polymer  
which contains 80 weight parts of a vinyl Me ether-maleic anhydride copolymer  
and 20 weight parts of poly(vinyl alc.) and then with a retardation layer.  
The retardation layer is composed of a graft copolymer of diacetone  
acrylamide 180, 2-cyanoethyl acrylate 12, 2-acrylamido-2-  
methylpropanesulfonic acid 1, and Et acrylate 12 weight parts on 22  
weight parts of poly(vinyl alc.). The test film was placed on a transparent  
polyester film support and a developer solution containing

hydroxyethyl CM-cellulose 4, 50% KOH 20.8, benzotriazole 1.1, thymolphthalein 0.5 g, and H<sub>2</sub>O 100 mL, was introduced between the support and test films using slit openings of 0.09, 0.07, and 0.05 mm. The penetration time after which the color of the film changed from blue to colorless (a measure of the time necessary for the developer to penetrate the retardation layer and react with the acid polymer layer to lower the pH) was measured. The values are given for the time of beginning of color change (T<sub>1</sub>) and the time at which the film was completely clear (T<sub>2</sub>). The results for T<sub>1</sub> and T<sub>2</sub> at the 3 decreasing slit openings are 585 and 665, 585 and 684, and 610 and 697 s, resp., vs. 180 and 265, 144 and 224, and 103 and 203 s, resp., for a film with a retardation layer containing 100 weight parts of a 60/4/30/6 copolymer of Bu acrylate-styrene-diacetone acrylamide-methacrylic acid and 7 weight parts poly(vinyl alc.).

IT 75117-32-7 75117-33-8 75117-34-9

75117-35-0

RL: USES (Uses)

(graft, photog. retardation layers from)

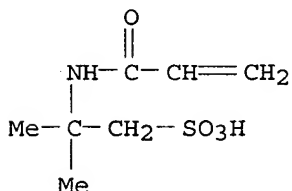
RN 75117-32-7 CAPLUS

CN 2-Propenoic acid, 2-cyanoethyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenol, ethyl 2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

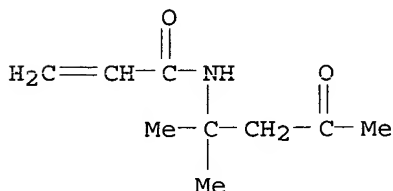
CMF C7 H13 N O4 S



CM 2

CRN 2873-97-4

CMF C9 H15 N O2

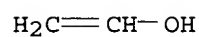


KOROMA EIC1700

CM 3

CRN 557-75-5

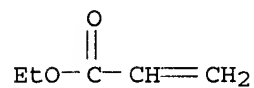
CMF C2 H4 O



CM 4

CRN 140-88-5

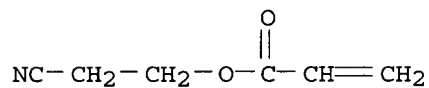
CMF C5 H8 O2



CM 5

CRN 106-71-8

CMF C6 H7 N O2



RN 75117-33-8 CAPLUS

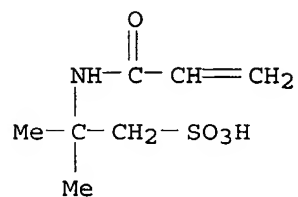
CN 2-Propenoic acid, 2-cyanoethyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenol, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

CMF C7 H13 N O4 S

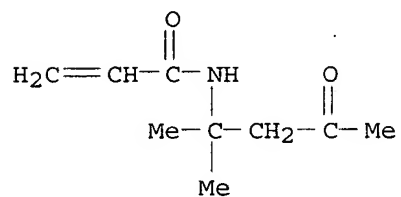




CM 2

CRN 2873-97-4

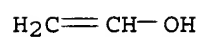
CMF C9 H15 N O2



CM 3

CRN 557-75-5

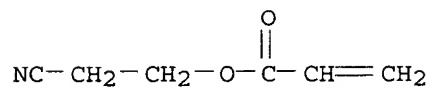
CMF C2 H4 O



CM 4

CRN 106-71-8

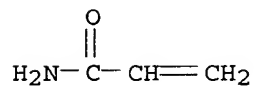
CMF C6 H7 N O2



CM 5

CRN 79-06-1

CMF C3 H5 N O



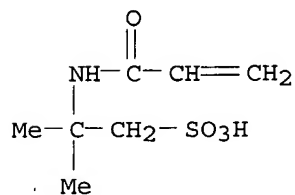
RN 75117-34-9 CAPLUS

CN 2-Propenoic acid, 2-cyanoethyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenol and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

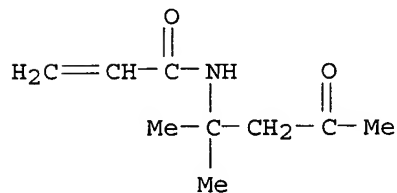
CMF C7 H13 N O4 S



CM 2

CRN 2873-97-4

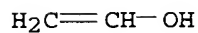
CMF C9 H15 N O2



CM 3

CRN 557-75-5

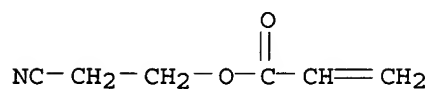
CMF C2 H4 O



CM 4

KOROMA EIC1700

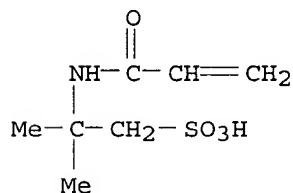
CRN 106-71-8  
CMF C6 H7 N O2



RN 75117-35-0 CAPLUS  
CN 2-Propenoic acid, butyl ester, polymer with 2-cyanoethyl 2-propenoate, ethenol and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

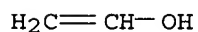
CM 1

CRN 15214-89-8  
CMF C7 H13 N O4 S



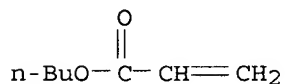
CM 2

CRN 557-75-5  
CMF C2 H4 O



CM 3

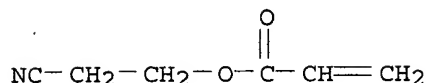
CRN 141-32-2  
CMF C7 H12 O2



CM 4

CRN 106-71-8

CMF C6 H7 N O2



IC G03C005-54

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST retardation layer **photog** graft polymer

IT **Photographic** films

(diffusion-transfer, graft polymers as retardation layers in)

IT 79-10-7D, alkyl esters, polymers 79-41-4D, alkyl esters, polymers

106-71-8D, polymers 2873-97-4D, polymers 4513-53-5D, polymers

9004-34-6D, polymers 75117-32-7 75117-33-8

75117-34-9 75117-35-0 75117-36-1 75248-86-1

76402-21-6D, polymers 76429-27-1

RL: USES (Uses)

(graft, **photog.** retardation layers from)

L15 ANSWER 52 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1980:155821 CAPLUS

DOCUMENT NUMBER: 92:155821

TITLE: Amide compounds and polymers thereof useful in **photographic** materials

AUTHOR(S): Ponticello, I. A.; Hollister, K. R.; Tuites, R. C.

CORPORATE SOURCE: UK

SOURCE: Research Disclosure (1979), 187, 657-9

CODEN: RSDSBB; ISSN: 0374-4353

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Amide compound polymers which can be used in **photog.** materials as polymeric color couplers, binders, or extenders for binders are prepared from monomers having the formula  $\text{CH}_2:\text{CRCOZCOCH}_2\text{R}_1$  [R = H, Me; R<sub>1</sub> = CN, COR<sub>2</sub> (R<sub>2</sub> = alkyl), Z = Z<sub>1</sub>Z<sub>2</sub>Z<sub>1</sub> (Z<sub>1</sub> = O or NR<sub>4</sub> where R<sub>4</sub> = H or alkyl; Z<sub>2</sub> = a divalent hydrocarbon) or a 5-7 membered ring containing ZN atoms and bonded through these atoms],  $\text{CH}_2:\text{CRCONR}_4\text{Z}_2\text{O}_2\text{CCH}_2\text{R}_1$  (R, R<sub>1</sub>, R<sub>4</sub>, and Z<sub>2</sub> are the same as above), and addnl. monomers selected from acrylamides, sulfoesters, sulfonamides, and amides of ethylenically unsatd. carboxylic acids. These compds. are water-dispersible and crosslinkable. Thus, a dope prepared from a polymer prepared from 2-acrylamido-2-methylpropane-1-sulfonic acid Na salt and 4'-chloro-3'-[α-(4-methoxycarbonylphenoxy)-α-pivaloylacetamido]acrylamide (coupler monomer) was coated as a yellow dye-forming coupler (4.05 g/m<sup>2</sup>) in a Ag halide **photog.** element comprising a cellulose acetate film support having coated on 1 surface thereof a gelatin-Ag(Br,I) emulsion layer and a protective overcoat layer comprising gelatin and

bis(vinylsulfonylmethyl) ether hardener. The resulting element was evaluated and the polymeric coupler was observed to be effectively crosslinked and did not diffuse out of the element into the **processing solution**. Color development of the element gave a Dmax of 2.50 (0 min soak) and Dmax of 2.46 (20 min soak).

IT 72689-30-6

RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** cyan coupler)

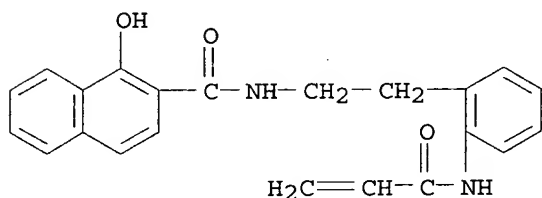
RN 72689-30-6 CAPLUS

CN Butanoic acid, 3-oxo-, 2-[(1-oxo-2-propenyl)amino]ethyl ester, polymer with 1-hydroxy-N-[2-[2-[(1-oxo-2-propenyl)amino]phenyl]ethyl]-2-naphthalenecarboxamide and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 72689-29-3

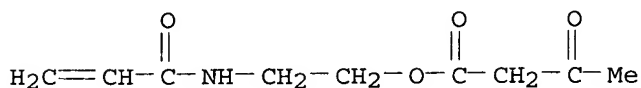
CMF C22 H20 N2 O3



CM 2

CRN 71938-41-5

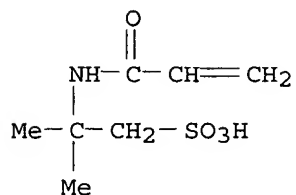
CMF C9 H13 N O4



CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

IT 72689-31-7

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. yellow coupler)

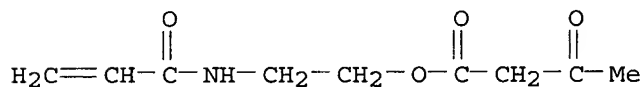
RN 72689-31-7 CAPLUS

CN Benzoic acid, 4-[1-[[[2-chloro-5-[(1-oxo-2-propenyl)amino]phenyl]amino]carbonyl]-3,3-dimethyl-2-oxobutoxy]-, methyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and 2-[(1-oxo-2-propenyl)amino]ethyl 3-oxobutanoate (9CI) (CA INDEX NAME)

CM 1

CRN 71938-41-5

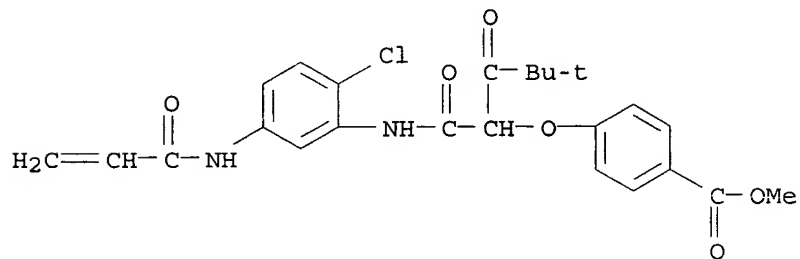
CMF C9 H13 N O4



CM 2

CRN 68805-73-2

CMF C24 H25 Cl N2 O6

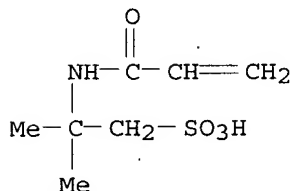


KOROMA EIC1700

CM 3

CRN 5165-97-9

CMF C7 H13 N O4 S . Na



● Na

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST amide compd polymer **photog**; coupler **photog** amide compd polymer; binder **photog** amide compd polymer

IT Binding materials  
(amide compound polymers as, for **photog.** materials)

IT Amides, polymers  
RL: USES (Uses)  
(as binders for polymeric couplers in **photog.**)

IT **Photographic** couplers  
(coupler group-containing amide compound polymers as)

IT **Photographic** emulsions  
(gelatin substitutes for, amide compound polymers as)

IT 72689-27-1  
RL: USES (Uses)  
(binder, for use in **photog.** materials)

IT 72689-30-6  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** cyan coupler)

IT 72689-31-7  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**photog.** yellow coupler)

IT 72689-28-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

L15 ANSWER 53 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1978:451362 CAPLUS

DOCUMENT NUMBER: 89:51362

TITLE: **Photographic** elements having hydrophilic colloid layers containing compounds having activator precursors and hydrophobic developing agents uniformly loaded in latex polymer particles

KOROMA EIC1700

AUTHOR(S): Chen, T. J.; McLaen, D. F.  
 CORPORATE SOURCE: UK  
 SOURCE: Research Disclosure (1978), 169, 24-7  
 CODEN: RSDSBB; ISSN: 0374-4353  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Heat-developable Ag halide photog. materials are comprised of a support coated with a hydrophilic colloid layer containing Ag halides, an activator precursor of a compound of a protonated basic N-containing moiety and an acid anion, and a hydrophobic developing agent loaded in latex polymer particles. During thermal processing, the activator precursor releases a base to facilitate photog. development in conjunction with the encapsulated developing agent. Thus, to an aqueous solution of latex L-1 (16.8% solids content) was added a 10% aqueous solution of nonylphenoxypolyglycidol (I) 2 mL. The resulting latex composition was added to a solution of H-1 developer 3 g and MeOH 20 mL. The dispersion 1.5 mL was mixed with 2-amino-2-thiazolinium trichloroacetate 0.6 g, a 10% aqueous solution of I 0.3, MeOH 2.45, a gelatin-Ag halide emulsion (average Ag halide grain size 0.09  $\mu$  and 70 mg Ag/0.75 mL) 0.75 mL, coated on a paper support at 7.5 mg Ag/dm<sup>2</sup>, exposed through a step tablet, and thermally processed at 130-200° for 10 s. The photog. paper exhibited satisfactory photog. properties, and no stain was observed after the completion of the processing.

IT 67030-33-5

RL: USES (Uses)

(microencapsulation by, of hydrophobic developing agents in heat-developable silver halide-gelatin photog. emulsions)

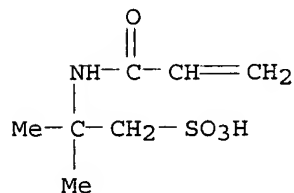
RN 67030-33-5 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with butyl 2-methyl-2-propenoate and 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8

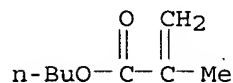
CMF C7 H13 N O4 S



CM 2



CRN 97-88-1  
CMF C8 H14 O2

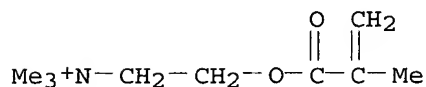


CM 3

CRN 6891-44-7  
CMF C9 H18 N O2 . C H3 O4 S

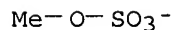
CM 4

CRN 33611-56-2  
CMF C9 H18 N O2



CM 5

CRN 21228-90-0  
CMF C H3 O4 S



- CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic Processes)
- ST photothermog emulsion incorporation hydrophobic developer
- IT Photothermography  
(photosensitive silver halide-gelatin emulsions containing activator precursor and encapsulated hydrophobic developing agent for)
- IT Photographic emulsions  
(heat-developable, containing activator precursor and encapsulated hydrophobic developing agent)
- IT 67030-33-5  
RL: USES (Uses)  
(microencapsulation by, of hydrophobic developing agents in heat-developable silver halide-gelatin photog. emulsions)
- IT 63173-68-2

RL: USES (Uses)

(**photog.** activator precursor, for **silver halide**-gelatin emulsions containing encapsulated hydrophobic developing agent for **photothermog.**)

IT 66988-18-9

RL: USES (Uses)

(surfactant, for **silver halide**-gelatin emulsions containing microencapsulated hydrophobic developing agent for **photothermog.**)

L15 ANSWER 54 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1977:163598 CAPLUS

DOCUMENT NUMBER: 86:163598

TITLE: Pyrazoloneazo dye-releasing coupler for diffusion-transfer **photographic** materials

INVENTOR(S): Fujita, Shinsaku; Harada, Tohru; Sakanoue, Seiki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 51133021	A2	19761118	JP 1975-57040	19750514
JP 57012982	B4	19820313		
PRIORITY APPLN. INFO.:			JP 1975-57040	19750514

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Diffusion-transfer **photog.** materials contain, in  $\leq 1$  of their **Ag** halide emulsion layers, a diffusable pyrazolonylazo dye-releasing coupler in which the pyrazolonylazo dye group is bonded via an O-containing group to the coupler part. The coupler does not release N during development, and gives a high-quality yellow dye. Thus, 1-phenyl-3-(N-hexylcarbamoyl-4-(p-sulfamoylphenylazo)-5-pyrazolone 5 g was treated with chlorosulfonic acid 25 mL at 10°. The resulting 1-(p-chlorosulfonylphenyl)-3-(N-hexylcarbamoyl)-4-(p-sulfamoylphenylazo)-5-pyrazolone 4.1 and 1-hydroxy-4-[4'-(4''-aminophenyl)-1',4'-dioxabutyl]-N-dodecylamino-2-naphthamide 4g were dispersed in THF 88 mL, pyridine 5.6 mL added, the mixture stirred for 4.5 h, and the reaction products were added to 1% HCl 500 mL to precipitate the coupler I (m.p. 196-8°). Then, I was added to a high-sensitivity neg. type red-sensitive **Ag**(Br,I) (7 mol% I) emulsion sensitized with 3,3',9-triethyl-5,5'-dichlorothiacyanine iodine, coated on a gelatin-coated cellulose triacetate support so that the amts. of I,

Ag halide, and gelatin in the red-sensitive emulsion layer were 1.5 + 10<sup>-5</sup>, 7.5 + 10<sup>-5</sup> mol, and 20 mg/100 cm<sup>2</sup>, resp., overcoated with gelatin 6.5 mg/100 cm<sup>2</sup>, exposed through an optical wedge and a red filter to a 2854 K W-lamp, placed on a receptor sheet prepared by coating baryta paper with a **solution** containing a polymer having the structure II (mol. weight 30,000-40,000) 35 and gelatin 7%, and **processed** with a **solution** containing ascorbic acid 0.2, 3-methyl-N-ethyl-N-(β-hydroxyethyl)-p-phenylenediamine H<sub>2</sub>SO<sub>4</sub> salt 35, KBr 1.4, 6-nitrobenzimidazole HNO<sub>3</sub> salt 0.2, hydroxyethyl cellulose 30, and NaOH 20 g/L to give an image having a maximum and min. d. of 2.0 and 0.10, resp., vs. 1.9 and 0.10, resp., for a control containing III instead of I.

IT 62548-90-7

RL: USES (Uses)

(**photog.** diffusion-transfer film image receptor layer containing)

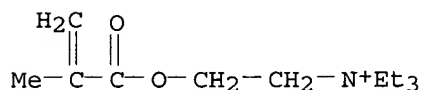
RN 62548-90-7 CAPLUS

CN Ethanaminium, N,N,N-triethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, ethanesulfonate, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 48067-10-3

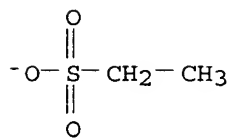
CMF C12 H24 N O2



CM 2

CRN 10047-83-3

CMF C2 H5 O3 S



IC G03C007-00

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST pyrazolone yellow coupler color **photog**

IT **Photographic** couplers

(yellow, pyrazolone derivs. as, for producing pyrazolonylazo dye images)

IT 62548-90-7

RL: USES (Uses)

(**photog.** diffusion-transfer film image receptor layer containing)

IT 62555-57-1 62555-58-2 62555-59-3 62555-60-6 62555-61-7  
62789-64-4

RL: TEM (Technical or engineered material use); USES (Uses)

(**photog.** yellow coupler, for producing pyrazolonylazo dye images)

IT 61387-49-3P 62555-62-8P 62555-63-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

L15 ANSWER 55 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1975:450697 CAPLUS

DOCUMENT NUMBER: 83:50697

TITLE: Synthetic **silver halide** emulsion  
binder

INVENTOR(S): Fitzgerald, Maurice J.

PATENT ASSIGNEE(S): Polaroid Corp., USA

SOURCE: U. S. Publ. Pat. Appl. B, 11 pp. Avail. US Pat.  
Trademark Off.

CODEN: USXXDP

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 320452	A1	19750128	US 1973-320452	19730102
US 3925083	A	19751209		

PRIORITY APPLN. INFO.: US 1973-320452 19730102

AB The gelatin in **photographic silver halide**

emulsions can be partially or totally replaced by a water-soluble film-forming polymeric salt having structure repeating units [R'CHCR2CO2ZN+R3R4R5].hivin.x (R1 R1 = H, Me, Et, or halogen; R2 = H, halogen, cyano, or lower alkyl group; R3, R4, R5 = lower alkyl or cycloalkyl group or when taken together represent the atoms necessary to complete a 3-8 numbered heterocyclic ring; Z = C1-4 alkylene or C3-6 cycloalkylene group; and X = halide, **sulfate**, alkylsulfonate, arylsulfonate, nitrate). Thus, a **photographic Ag** (Br,I) emulsion was prepared using (4.15g/55g AgNO3) acrylamide- $\beta$ -(methacryloxy)ethyltrimethylammonium methyl **sulfate** polymer as the hydrophilic colloid in the precipitation and ripening stages. Poly(vinyl alc.) and surfactant Aerosol OT were added to this emulsion and it was coated on a gelatin-subbed cellulose triacetate support, air-dried, exposed on a sensitometer, and **processed** with a **processing solution** in contact with an image-receiving sheet for 10 sec. Upon separation of the sheet, a pos. image was obtained on the image-receiving sheet having a Dmax of 1.32 and Dmim of 0.12.

IT 26006-22-4 27103-90-8 42033-41-0  
55216-72-3 55216-74-5

RL: USES (Uses)

(as photographic emulsion gelatin substitute)

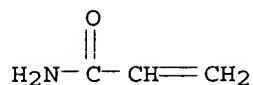
RN 26006-22-4 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1

CMF C3 H5 N O



CM 2

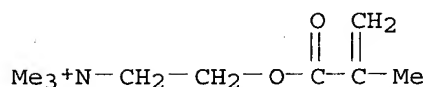
CRN 6891-44-7

CMF C9 H18 N O2 . C H3 O4 S

CM 3

CRN 33611-56-2

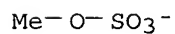
CMF C9 H18 N O2



CM 4

CRN 21228-90-0

CMF C H3 O4 S



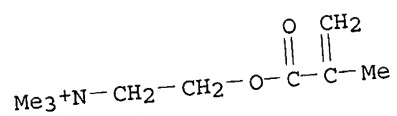
RN 27103-90-8 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, methyl sulfate, homopolymer (9CI) (CA INDEX NAME)

CM 1

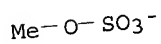
CRN 33611-56-2

CMF C9 H18 N O2



CM 2

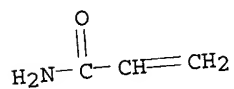
CRN 21228-90-0  
CMF C H3 O4 S



RN 42033-41-0 CAPLUS  
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, salt  
with 4-methylbenzenesulfonic acid (1:1), polymer with 2-propenamide (9CI)  
(CA INDEX NAME)

CM 1

CRN 79-06-1  
CMF C3 H5 N O

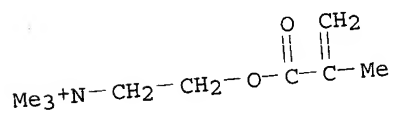


CM 2

CRN 40820-77-7  
CMF C9 H18 N O2 . C7 H7 O3 S

CM 3

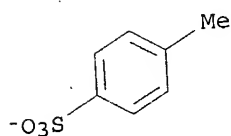
CRN 33611-56-2  
CMF C9 H18 N O2



CM 4

KOROMA EIC1700

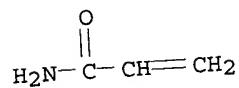
CRN 16722-51-3  
CMF C7 H7 O3 S



RN 55216-72-3 CAPLUS  
CN Ethanaminium, N-ethyl-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxyl]-,  
ethyl sulfate, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1  
CMF C3 H5 N O

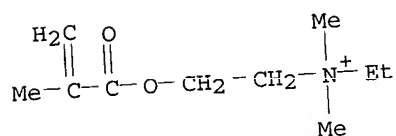


CM 2

CRN 13223-03-5  
CMF C10 H20 N O2 . C2 H5 O4 S

CM 3

CRN 48063-69-0  
CMF C10 H20 N O2



CM 4

CRN 48028-76-8  
CMF C2 H5 O4 S

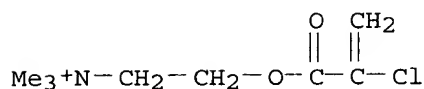
Et-O-SO<sub>3</sub><sup>-</sup>

RN 55216-74-5 CAPLUS  
 CN Ethanaminium, 2-[(2-chloro-1-oxo-2-propenyl)oxy]-N,N,N-trimethyl-, salt  
 with 4-methylbenzenesulfonic acid (1:1), homopolymer (9CI) (CA INDEX  
 NAME)

CM 1

CRN 55216-73-4

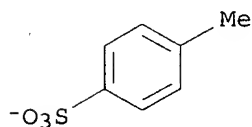
CMF C8 H15 Cl N O2



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



IC G03C  
 NCL 096114000  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic  
 Processes)  
 ST gelatin substitute **photographic** emulsion; acrylamide polymer  
 gelatin substitute; ammonium alkyl acrylate polymer **photog**  
 IT **Photographic** emulsions  
 (gelatin substitutes for, acrylamide-quaternary ammonium alkyl acrylate  
 salt copolymers as)  
 IT 25609-94-3 26006-22-4 27015-43-6 27103-90-8  
 28474-62-6 42033-41-0 55216-72-3 55216-74-5  
 RL: USES (Uses)  
 (as **photographic** emulsion gelatin substitute)  
 IT 577-11-7  
 RL: USES (Uses)  
 (photographic gelatin-free emulsion cocntg. poly(vinyl alc.,  
 quaternary ammonium salt polymer binder, and)  
 IT 9002-89-5  
 RL: USES (Uses)

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(photographic gelatin-free emulsion containing quaternary ammonium salt polymer binders and)

L15 ANSWER 56 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1974:497751 CAPLUS  
 DOCUMENT NUMBER: 81:97751  
 TITLE: Polymers containing resorcinol groups for use in  
 photographic elements  
 INVENTOR(S): Scullard, Peter W.  
 PATENT ASSIGNEE(S): Eastman Kodak Co.  
 SOURCE: U.S., 8 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3772014	A	19731113	US 1971-181261	19710916
PRIORITY APPLN. INFO.:			US 1971-181261	19710916

AB The copolymers containing resorcinol groups are used for removing the oxidized developers in color **photog.** processing and thus improve the image quality. Thus, a film support coated with a multilayer **Ag** halide emulsion containing 5-acrylamidoresorcinol-Na methacryloyloxyethyl sulfate copolymer 70 mg/ft<sup>2</sup> was exposed and processed for 5 sec in a **developing solution** consisting of 4-amino-3-methoxy-N-ethyl-N-( $\beta$ -hydroxyethyl)aniline 5.1, piperidinohehexose reductone 0.8, hypo 5.0 g, NaOH 11.8 mg, and H<sub>2</sub>O to 11. An image receptor sheet containing gelatin, a cyan coupler, tricresyl **phosphate**, and Pd nuclei was presoaked in the above **developing solution** for 25 sec, and brought into contact with the above exposed **Ag** halide film for 3 min to give a dye image on the receptor sheet with only 2.2 mg **Ag**/ft<sup>2</sup> as compared to 13.1 mg **Ag**/ft<sup>2</sup> for a control containing 2,5-dipropylphenol at 60 mg/ft<sup>2</sup>. The low amount of **Ag** in the receptor sheet is indicative of the effectiveness of the resorcinol-containing polymer for scavenging the oxidized developers.

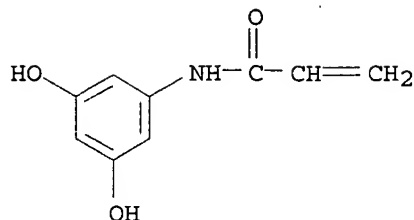
IT 53687-30-2  
 RL: USES (Uses)  
 (oxidized **photog.** developers removed by, in color **photog.** processing)

RN 53687-30-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(sulfooxy)ethyl ester, sodium salt, polymer with N-(3,5-dihydroxyphenyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

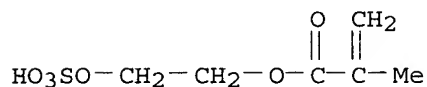
CRN 53687-29-9  
 CMF C9 H9 N O3



CM 2

CRN 45103-52-4

CMF C6 H10 O6 S . Na



● Na

IC G03C

NCL 096029000D

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST resorcinol scavenger **photog** developer

IT **Photographic** processing

(color, resorcinol copolymers as scavengers for oxidized developers in)

IT 53687-30-2 53687-31-3

RL: USES (Uses)

(oxidized **photog.** developers removed by, in color **photog.** processing)

IT 20734-67-2P 53687-29-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

L15 ANSWER 57 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1974:471126 CAPLUS

DOCUMENT NUMBER: 81:71126

TITLE: Imaging systems containing optically active polysulfoxide groups

INVENTOR(S): Haas, Howard C.

PATENT ASSIGNEE(S): Polaroid Corp.

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

KOROMA EIC1700

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3816127	A	19740611	US 1972-270973	19720712
			US 1972-270973	19720712

PRIORITY APPLN. INFO.:

AB An imaging system is described in which imaging is accomplished by contacting an exposed Ag halide emulsion with a layer composed of an optically active polymeric sulfoxide and subsequently with a developer that imagewise destroys the optical rotation of the sulfoxide group to form an image viewable using crossed polarizers. Thus, a polymeric support coated with a layer of poly(p-tolylvinyl sulfoxide) [mol. weight 2400 and optical rotation  $[\alpha]_{23D} = +194^\circ$  (in Me<sub>2</sub>CO)] was contacted with an imagewise exposed Ag halide emulsion followed by development with an aqueous acid solution of TiCl<sub>3</sub>. Upon separation of the sulfoxide layer and viewing between crossed polarizers an image was produced by selective destruction of centers of optical activity in areas corresponding to the unexposed areas of the Ag halide emulsion layer.

IT 31547-88-3

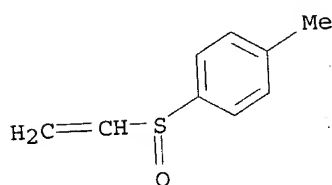
RL: PROC (Process)  
(photography of, by imagewise destruction of optical rotation of sulfoxide groups)

RN 31547-88-3 CAPLUS

CN Benzene, 1-(ethenylsulfinyl)-4-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 36832-47-0  
CMF C9 H10 O S



IC G03C

NCL 096029000R

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST optical rotation sulfoxide imaging; tolylvinyl sulfoxide polymer imaging

IT Photography

(by imagewise destruction of sulfoxide group optical rotation in polymeric sulfoxides)

IT Sulfoxides

RL: USES (Uses)

(polymers, photography on, by imagewise destruction of

KOROMA EIC1700

optical rotation of sulfoxide groups)

IT 31547-88-3

RL: PROC (Process)

(photography of, by imagewise destruction of optical rotation of sulfoxide groups)

L15 ANSWER 58 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1974:471054 CAPLUS

DOCUMENT NUMBER: 81:71054

TITLE: Photographic materials containing mordants

INVENTOR(S): Miyazako, Takushi; Tajima, Tatsuya; Kato, Hirotetu; Kokubu, Tadayoshi; Nishina, Tsutomu; Tsuji, Nobuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd.

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3795519	A	19740305	US 1972-274373	19720724
PRIORITY APPLN. INFO.:			JP 1971-57276	19710730

GI For diagram(s), see printed CA Issue.

AB Mordant compds. (for acid dyes in photog. materials), which have their mordanting action markedly reduced by alkaline processing solns. thereby decreasing unwanted acid dye holdup and sorption of thiosulfate ions and resulting in sharper images, are addition polymers of a bisacrylamide compound and a C1-4 alkyl-substituted piperazine or dialkylethylenediamine compound. Thus, an aqueous solution of pH 6.5 containing a 5% aqueous solution of methylenebisacrylamide-2,5-dimethylpiperazine polymer (I) 10 ml, 2% aqueous solution of dye II 10 ml, gelatin 5 g, saponin 0.1 g, mucochloric acid 0.1 g, and H2O 100 ml was coated on a cellulose triacetate support, overcoated successively with a fine-grain Ag (Br, Cl) emulsion and protective layer, and sensitometrically processed to give a much sharper image than that obtained with a control film without the I-II layer, and only caused a 20% reduction in sensitivity (based on above control) vs. 50% for a I-free II layer.

IT 53335-24-3

RL: USES (Uses)

(photog. mordant, for acid dyes, alkaline processing solution deactivatable)

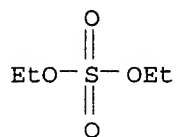
RN 53335-24-3 CAPLUS

CN Sulfuric acid, diethyl ester, compd. with N'-methylenebis[2-propenamide] polymer with piperazine (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5

CMF C4 H10 O4 S



CM 2

CRN 29192-86-7

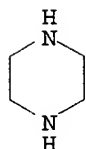
CMF (C7 H10 N2 O2 . C4 H10 N2)x

CCI PMS

CM 3

CRN 110-85-0

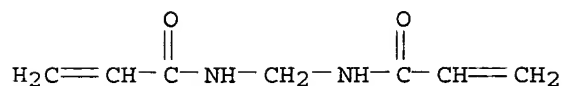
CMF C4 H10 N2



CM 4

CRN 110-26-9

CMF C7 H10 N2 O2



IC G03C

NCL 096084000A

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST mordant bisacrylamide polymer photog

IT Photographic emulsions

(mordants of bisacrylamides-piperazines or -dialkylethylenediamines addition polymers for, alkaline processing solution deactivatable)

IT 1301-23-1 27268-31-1 27268-33-3 27268-34-4 27280-01-9 28766-99-6

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34175-08-1 53100-87-1 53289-13-7

RL: USES (Uses)

(**photog.** addition polymer mordants for)

IT 29192-86-7 53161-79-8 53161-84-5 53161-85-6 53335-24-3

RL: USES (Uses)

(**photog.** mordant, for acid dyes, alkaline

**processing solution** deactivatable)

L15 ANSWER 59 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1973:36250 CAPLUS

DOCUMENT NUMBER: 78:36250

TITLE: **Photographic film unit for color photographs**

INVENTOR(S): Abbott, Thomas Irving

PATENT ASSIGNEE(S): Eastman Kodak Co.

SOURCE: Ger. Offen., 48 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2163261	A	19720629	DE 1971-2163261	19711220
US 3698896	A	19721017	US 1970-100486	19701221
CA 947134	A1	19740514	CA 1971-126964	19711105
NL 7117615	A	19720623	NL 1971-17615	19711221
FR 2119521	A5	19720804	FR 1971-45834	19711221
IT 944155	A	19730420	IT 1971-32682	19711221

PRIORITY APPLN. INFO.: US 1970-100486 19701221

AB In films of the type of U.S. 3,227,550 (CA 64: 16035a) the light-sensitive section carries 3 Ag halide emulsion (0.6-6  $\mu$ ) and 3 associated layers (1-7  $\mu$ ) containing color formers rendered nondiffusing by C8+ ballast groups attached in their coupling position through an O, N:N, S,S2, alkylidene, or Hg linkage. Reaction with oxidized developer generates diffusible dyes by splitting off the ballast groups. Between the emulsion-color former layer pairs there are gelatin interlayers (1-5  $\mu$ ) containing couplers reacting with diffusing oxidized developer to form immobile products and thus avoiding undesirable color formation. The developer, having a viscosity of 100-200,000 cP., has a pH >12 and may contain the developing agent if it is not present as a Schiff base (e.g. the reaction product of N,N-diethyl-3-methyl-4-aminoaniline with o-sulfobenzaldehyde) in the negative section. It is spread from a pressure-rupturable container between the negative and the receptor material. The latter (U.S. 3,445,228; Fr. 1,526,652; CA 71: 55534g) carries on its support an 8-50  $\mu$  layer of an acid polymer to lower the pH of the exhausted developer solution to 5-8 and thus stabilize the dye image in the top coating which contains polymeric dye mordants with quaternary N' groups, such as a copolymer from benzyldimethyl-(3-maleimidopropyl)-ammonium chloride and styrene. A hydrophilic top coating of 30-60 mg gelatin or casein per 0.09 m2 on the

receptor section increases the Dmax. values of the transferred dye images and decreases their Dmin.. It may also contain an uv absorber.

IT 31628-57-6

RL: USES (Uses)  
(photographic color diffusion-transfer emulsion image receiving layers containing)

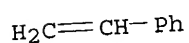
RN 31628-57-6 CAPLUS

CN 1H-Pyrrole-1-propanaminium, 2,5-dihydro-N,N,N-trimethyl-2,5-dioxo-, salt with 4-methylbenzenesulfonic acid (1:1), polymer with ethenylbenzene (9CI)  
(CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8



CM 2

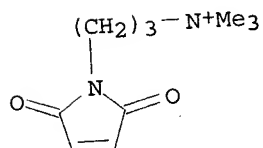
CRN 29213-62-5

CMF C10 H17 N2 O2 . C7 H7 O3 S

CM 3

CRN 46277-50-3

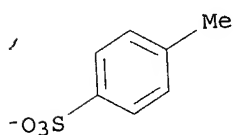
CMF C10 H17 N2 O2



CM 4

CRN 16722-51-3

CMF C7 H7 O3 S



KOROMA EIC1700

IC G03C  
 CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)  
 ST dye diffusion color **photog**  
 IT **Photographic** emulsions  
 (color, diffusion-transfer, containing nondiffusing color formers)  
 IT 31628-57-6 40399-52-8  
 RL: USES (Uses)  
 (photographic color diffusion-transfer emulsion image receiving layers containing)

L15 ANSWER 60 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1972:29523 CAPLUS  
 DOCUMENT NUMBER: 76:29523  
 TITLE: Mordant compositions for use in **photographic** elements  
 INVENTOR(S): Kalenda, Norman W.  
 PATENT ASSIGNEE(S): Eastman Kodak Co.  
 SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3615545	A	19711026	US 1967-666473	19670908
BE 720436	A	19690217	BE 1968-720436	19680905
GB 1222714	A	19710217	GB 1968-1222714	19680905
FR 1602521	A	19701221	FR 1968-1602521	19680906

PRIORITY APPLN. INFO.: US 1967-666473 19670908

AB Besides gelatin, a basic mordant with >25% quaternated N units (U.S. 3,444,138; CA 71: 71464), and an acid filter dye (such as the oxonol dyes of U.S. 3,247, 127; CA 60: 4289h), the layers contain 25-75% of a copolymer of an alkyl acrylate with 7-20% of an ethylenic monomer containing solubilizing sulfonic ester, SO<sub>3</sub>H, or CO<sub>2</sub>H groups. Such layers adhere well to various supports, including polyester films, can be **processed** in alkaline **solns.**, release the dyes in them, and have a very low tendency to crack during aging. Thus, a mordant with 40% recurring (vinyl pyridiniumacetate) chloride units was prepared from poly(vinyl chloroacetate) and pyridine, combined with 10% **aqueous** gelatin, a **solution** of a dye mixture added and the pH adjusted to 5.9. After addition of an **aqueous solution** of a Me acrylate-Na 3-(acryloyloxy)propane-1-sulfonate copolymer, the mixture was hardened with HCHO and coated on a poly(ethylene terephthalate) support to be overcoated with a Ag halide emulsion.

IT 27082-75-3 28185-31-1 29438-48-0  
 30968-57-1 32238-23-6  
 RL: USES (Uses)

(photographic antihalation layers containing basic mordants and)

RN 27082-75-3 CAPLUS

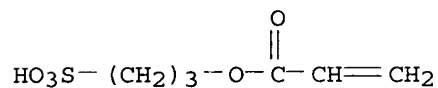


CN 2-Propenoic acid, methyl ester, polymer with 3-sulfopropyl 2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 15717-25-6

CMF C6 H10 O5 S . Na

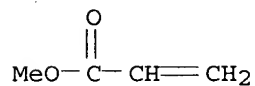


● Na

CM .2

CRN 96-33-3

CMF C4 H6 O2



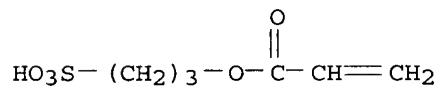
RN 28185-31-1 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 3-sulfopropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 39121-78-3

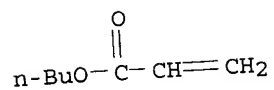
CMF C6 H10 O5 S



CM 2

CRN 141-32-2

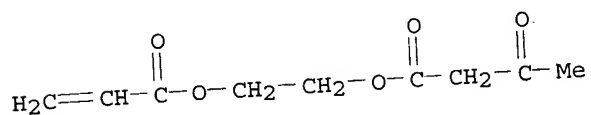
CMF C7 H12 O2



RN 29438-48-0 CAPLUS  
 CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-  
 3-sulfo-, inner salt, polymer with butyl 2-propenoate,  
 2-[(1-oxo-2-propenyl)oxy]ethyl 3-oxobutanoate and 2-propenoic acid (9CI)  
 (CA INDEX NAME)

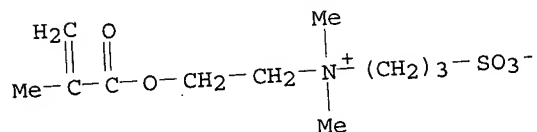
CM 1

CRN 21282-96-2  
 CMF C9 H12 O5



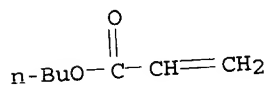
CM 2

CRN 3637-26-1  
 CMF C11 H21 N O5 S



CM 3

CRN 141-32-2  
 CMF C7 H12 O2

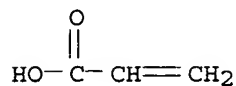


CM 4

CRN 79-10-7

KOROMA EIC1700

CMF C3 H4 O2



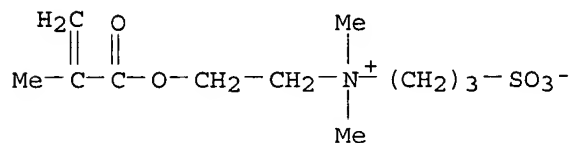
RN 30968-57-1 CAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 3637-26-1

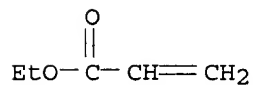
CMF C11 H21 N O5 S



CM 2

CRN 140-88-5

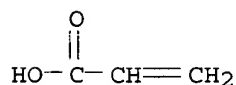
CMF C5 H8 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



RN 32238-23-6 CAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-

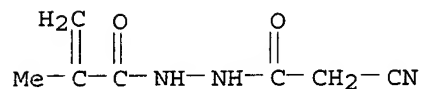
KOROMA EIC1700

3-sulfo-, inner salt, polymer with butyl 2-propenoate,  
2-methyl-2-propenoic acid 2-(cyanoacetyl)hydrazide and 2-propenoic acid  
(9CI) (CA INDEX NAME)

CM 1

CRN 45025-42-1

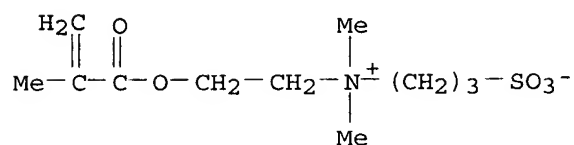
CMF C7 H9 N3 O2



CM 2

CRN 3637-26-1

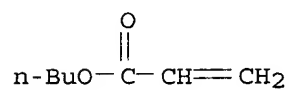
CMF C11 H21 N O5 S



CM 3

CRN 141-32-2

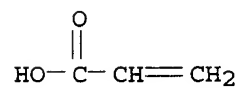
CMF C7 H12 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC G03C  
 NCL 096084000A  
 CC 74 (Radiation Chemistry, Photochemistry, and Photographic Processes)  
 ST mordant antihalation layer; polyester support antihalation layer; support polyester antihalation layer  
 IT **Photographic films**  
 (antihalation interlayers for, containing basic mordants and acrylic copolymers)  
 IT 25085-35-2 25119-83-9 27082-75-3 28185-31-1  
 29438-48-0 30968-57-1 32238-23-6  
 RL: USES (Uses)  
 (photographic antihalation layers containing basic mordants and)

L15 ANSWER 61 OF 61 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1970:95306 CAPLUS  
 DOCUMENT NUMBER: 72:95306  
 TITLE: **Photographic emulsions for rapid processing**  
 INVENTOR(S): Taber, Robert C.; Russell, William Henry  
 PATENT ASSIGNEE(S): Eastman Kodak Co.  
 SOURCE: Fr., 19 pp.  
 CODEN: FRXXAK  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1571047		19690913		
DE 1772720			DE	
GB 1234613			GB	
US 3647459		19720000	US	
PRIORITY APPLN. INFO.:			US	19670628
			US	19680201

AB Replacement of 25-75% of the gelatin in iodobromide emulsions by alkyl acrylate copolymers with a glass-transition temperature of < 20° and compatible with the gelatin, causes rapid action of the **processing solns.** and fast drying of images with superior clarity, Dmax, contrast, abrasion resistance, and with lower fog. At 38-49° the processing time is <2 min. Also, 5 mμ - 5μ inert, water-insol. particles (cellulose ester, SiO2), 3-10 mg/dm2, may be added, and as development modifiers 1-15 millimoles per mole of Ag halide of a nitroazole (5-nitroindazole), 5-mercaptotetrazole; or of an anthraquinone-2-sulfonate. Copolymers with <20% acrylic acid or sulfo ester units, to increase their water-solubility, yield particularly good results. An example is a terpolymer of Et acrylate, acrylic acid, and 2-(acetoacetoxy)ethyl methacrylate.  
 IT 26656-43-9 27175-12-8 27175-13-9  
 RL: USES (Uses)  
 (photographic gelatin substitute, for rapid processing)

emulsions)

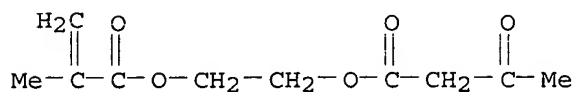
RN 26656-43-9 CAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate and 3-sulfopropyl 2-propenoate sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 21282-97-3

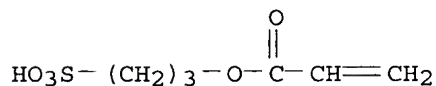
CMF C10 H14 O5



CM 2

CRN 15717-25-6

CMF C6 H10 O5 S . Na

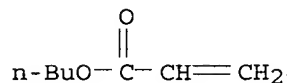


● Na

CM 3

CRN 141-32-2

CMF C7 H12 O2



RN 27175-12-8 CAPLUS

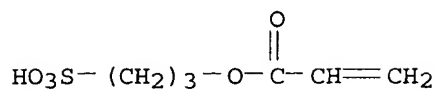
CN Acrylic acid, ester with 3-hydroxy-1-propanesulfonic acid, polymer with ethyl acrylate (8CI) (CA INDEX NAME)

CM 1

CRN 39121-78-3

KOROMA EIC1700

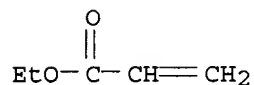
CMF C6 H10 O5 S



CM 2

CRN 140-88-5

CMF C5 H8 O2



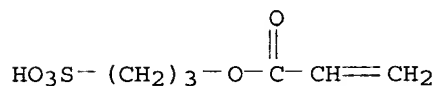
RN 27175-13-9 CAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with methyl 2-propenoate and 3-sulfopropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 39121-78-3

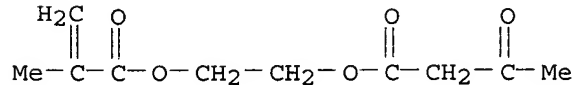
CMF C6 H10 O5 S



CM 2

CRN 21282-97-3

CMF C10 H14 O5

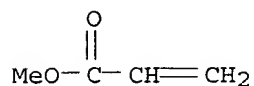


CM 3

CRN 96-33-3

KOROMA EIC1700

CMF C4 H6 O2



IC G03C  
CC 74 (Radiation Chemistry, Photochemistry, and Photographic Processes)  
ST acrylates **photog** binders; binders acrylates **photog**;  
gelatin acrylates binders; **silver** iodobromide acrylates binders  
IT **Photographic** emulsions  
(alkyl acrylate copolymers in, as gelatin substitutes, for rapid processing)  
IT 94-97-3 131-08-8 136-85-6 149-30-4 5401-94-5 27975-92-4  
RL: USES (Uses)  
(**photographic** development modifier, for rapid processing emulsions)  
IT 26656-42-8 26656-43-9 27175-12-8 27175-13-9  
27175-14-0  
RL: USES (Uses)  
(**photographic** gelatin substitute, for rapid processing emulsions)

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